

March

NATION'S

1943

BUSINESS



See
MANAGEMENT'S
Washington
LETT

NOT ALONE...

"Funny how you get to thinking up here in the hell of battle. Somehow, pictures of home keep flickering through your mind. . .

"A second ago, to your Axis foe, you were a harmless dot in the sun. Now—a blazing battery of wrathful guns!

"Strange that as you watch him begin to smoke and turn away and drop, you see yourself in your mother's busy kitchen, leaning against the wall and talking—or all at once, above the engine's roar, you hear your brother singing beside you.

"And suddenly you know that, after all, *you and your Corsair are not alone!*

"Strange, too, that the extra power that helped you to victory came from an engine built by men who once made peaceful things—like the refrigerator in your kitchen or the car parked at

your front door. Strangest of all to think that the 'N-K' brand your engine bears may have been put there by your father's hands, in the factory out home." . . .

When the Navy's new Corsair fighter flies to victory, the men of Nash-Kelvinator may well be proud. For the Corsair's two-thousand-horsepower Pratt & Whitney engine is built to give it the edge over *any Axis plane known!*

This is our job—to make America supreme in the air. And because not just our engines and propellers but our sons and brothers are up there fighting in the sky—we're giving it all we've got!

Listen! In the roar of their engines—you can hear the beating of our hearts!

NASH-KELVINATOR CORPORATION
Detroit, Michigan

Let's keep the battle rolling—with War Bonds and all the scrap we can collect!

NASH  **KELVINATOR**

Our duty is twofold: To help build weapons for Victory and to help build the kind of America our boys have a right to expect when they come home.



Tires Made with B. F. Goodrich Synthetic Now Rolling on Nation's Buses

A typical example of B. F. Goodrich leadership in tires

YOU'VE read plenty about synthetic rubber, about the tires that are *going* to be made with synthetics. But did you know that right now many a bus in Chicago, Boston, Cleveland and New York is trying out tires using synthetic rubber made by B. F. Goodrich?

One of these tires is shown in the picture—an Ameripol Silvertown being inspected after more than 8,000 miles on the wheel.

Varying amounts of synthetic rubber have been used in making these new Ameripol bus tires—but some of them now actually in service contain over 99% synthetic rubber.

B. F. Goodrich was *first* to offer for sale tires made with synthetic rubber for

passenger cars—that was in 1940! And now B. F. Goodrich pioneers with Ameripol Silvertowns for buses. Production is not unlimited. The rubber shortage is still acute. But already synthetic tires made by B. F. Goodrich are helping in the war effort.

The Army and Navy get first call on every ounce of synthetic rubber we make. Right now there is little, if any, for general civilian use. There will be some for essential transportation.

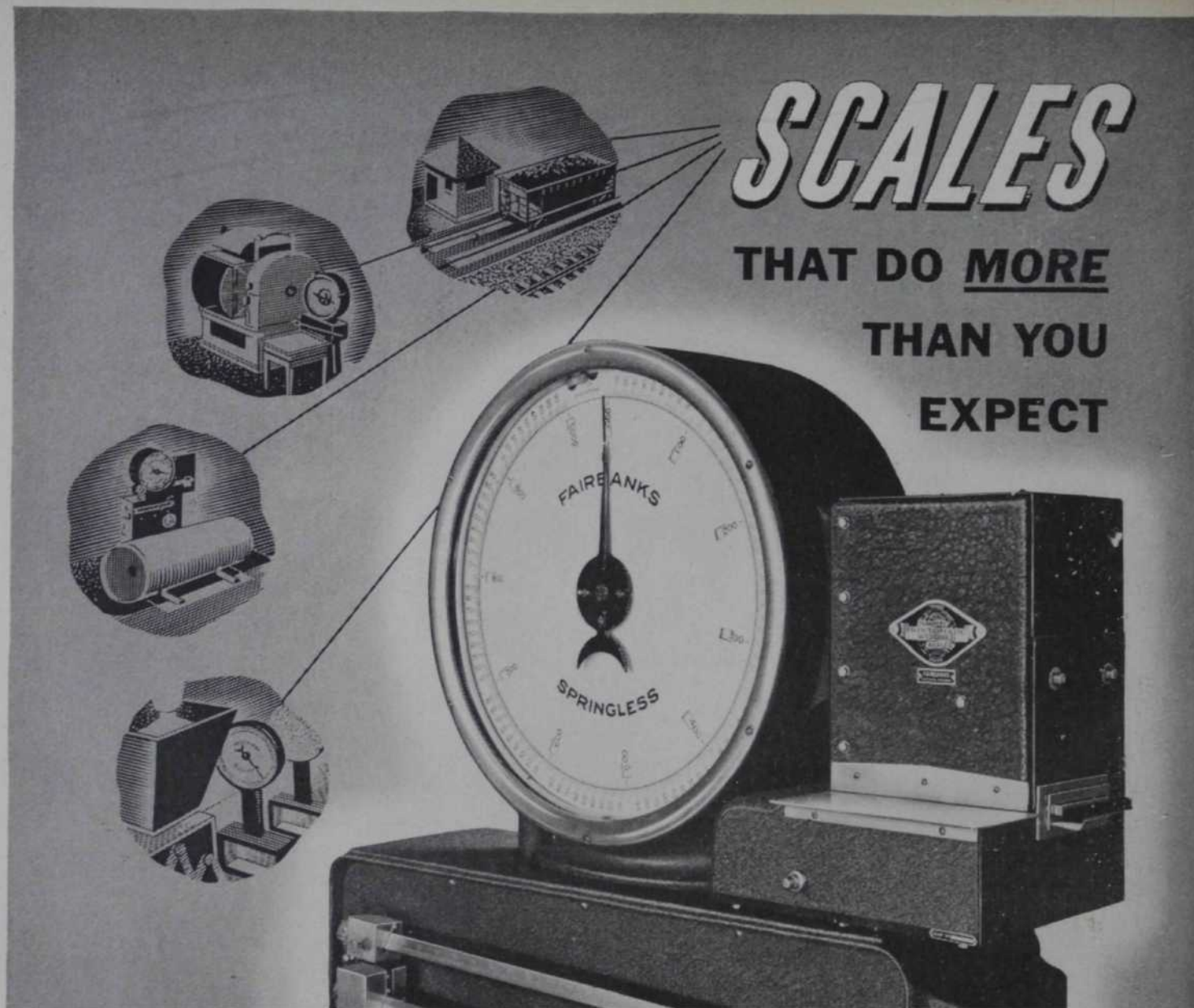
And when synthetic rubber is plentiful, come to B. F. Goodrich for your tires.

You can be sure that B. F. Goodrich will be first just as B. F. Goodrich was first to offer American car owners tires made with synthetic rubber. Remember, nobody makes as good a cake as the cook who discovers the recipe!



SCALES

THAT DO MORE
THAN YOU
EXPECT



OF course, Fairbanks Scales are big, husky, and accurate. You have a right to expect these things in *any* good scale—and particularly of Fairbanks Scales with the world's broadest scale manufacturing experience behind them.

The feature about Fairbanks Scales that may surprise you the most, is their ability to do things you *don't* expect of scales.

Here are a few of many jobs done by Fairbanks Scales:

- They count small parts—more accurately than manual counting
- They weigh carloads of coal in motion and make a printed record of each weight
- They automatically control paint ingredients
- They automatically control aggregates
- They "keep the books" in steel plants, making printed records of incoming and outgoing shipments
- They keep accurate records on chlorination in water treatment
- They record the *flow* of liquid chemicals
- They guard secret formulas in compounding
- They control batching in bakeries
- They prevent disputes by eliminating the human element in weighing.

AND all of these things, only the beginning of the story, they do automatically and mechanically thereby eliminating human errors.

How Fairbanks Scales can be fitted into your production flow to speed up operations and eliminate errors may prove to be the most interesting discovery you ever made. Investigate now. Write Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago, Illinois.



FAIRBANKS-MORSE

DIESEL ENGINES
PUMPS
MOTORS
GENERATORS
SCALES

WATER SYSTEMS
FARM EQUIPMENT
STOKERS
AIR CONDITIONERS
RAILROAD EQUIPMENT



Scales



The man behind the Hun

This "Battle of Production" we hear so much about isn't any pushover for our side.

Back of the Axis armies are some of the world's most capable scientists, engineers, inventors and research workers, *stretching to the utmost their materials for making the weapons of war*. In the Axis factories are millions of skilled workers, producing for their very lives.

Night and day the air forces of the United Nations are over Nazi industrial centers to cripple production with bombs. But that alone won't do it. In the last analysis it's up to American industry and American workers to "beat the man behind the Hun." Plant for plant, man for

man, we must outproduce our enemies' huge industrial armies.

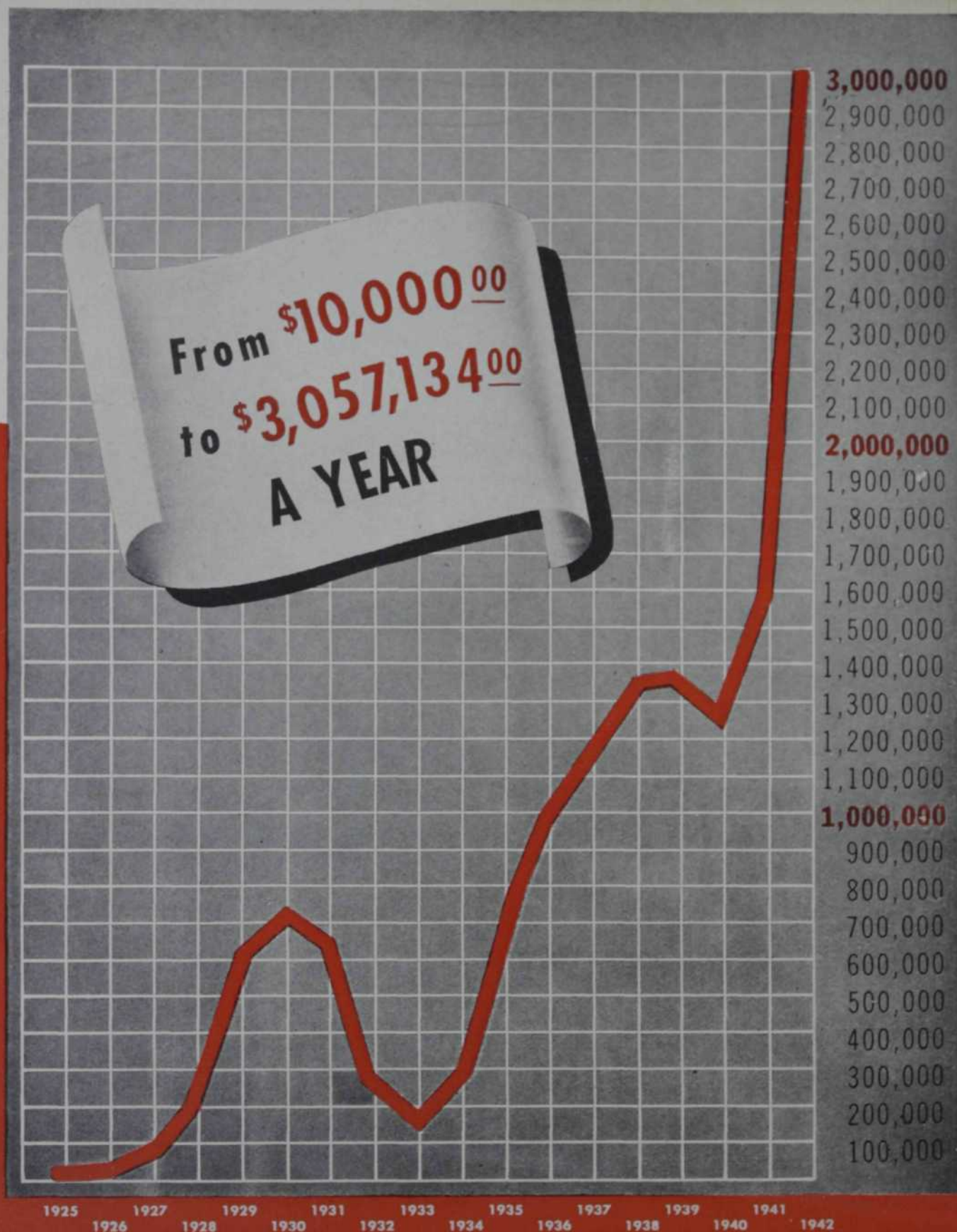
Ethyl antiknock fluid is one of the thousands of war materials needed by the United Nations. But to the some 4000 men and women today engaged in the processes of making Ethyl fluid, it is the *only* material. They know that Ethyl fluid goes into every gallon of America's superb military gasolines. Their slogan is: "*Every drop of Ethyl counts.*"

ETHYL CORPORATION

Chrysler Building, New York City

Manufacturer of Ethyl fluid, used by oil companies to improve the antiknock quality of aviation and motor gasoline





GEORGE S. MAY COMPANY

CHICAGO
May Building
2600 North Shore Ave.

Business Engineering

CANADA: 320 Bay St., Toronto

NEW YORK
Chanin Building
122 East 42nd Street

OFFICES IN PRINCIPAL CITIES



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Cover photo by R. I. Nesmith

MERLE THORPE—Editor and Publisher

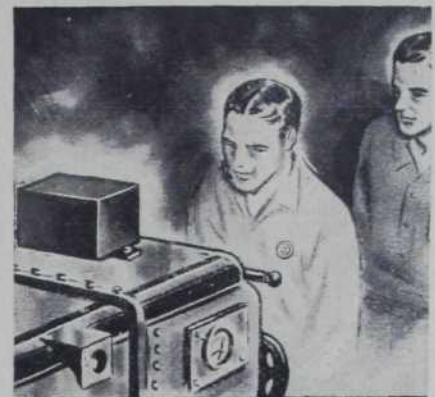
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As the official magazine of the Chamber of Commerce of the United States this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers.

Although the editors will make every effort to return unsolicited manuscripts promptly and in good condition, Nation's Business cannot accept responsibility for loss or damage of this material.



**LOOK .. FOR THE
LITTLE BLACK BOX!**

● We believe every good American wants above all to get this war won. Certainly that is the spirit here in the "Connecticut" plant. But postwar planning is as necessary to the business world as to government.

We do not believe tomorrow's world and yesterday's world have much in common.

We think that many of tomorrow's better things will come from "a little black box" containing automatic electric and electronic equipment. It will do much more than turn things on and off automatically at certain times—it will "look inside" materials being fabricated into finished products, "inspect" transportation equipment to be sure it is safe. It will improve communications amazingly.

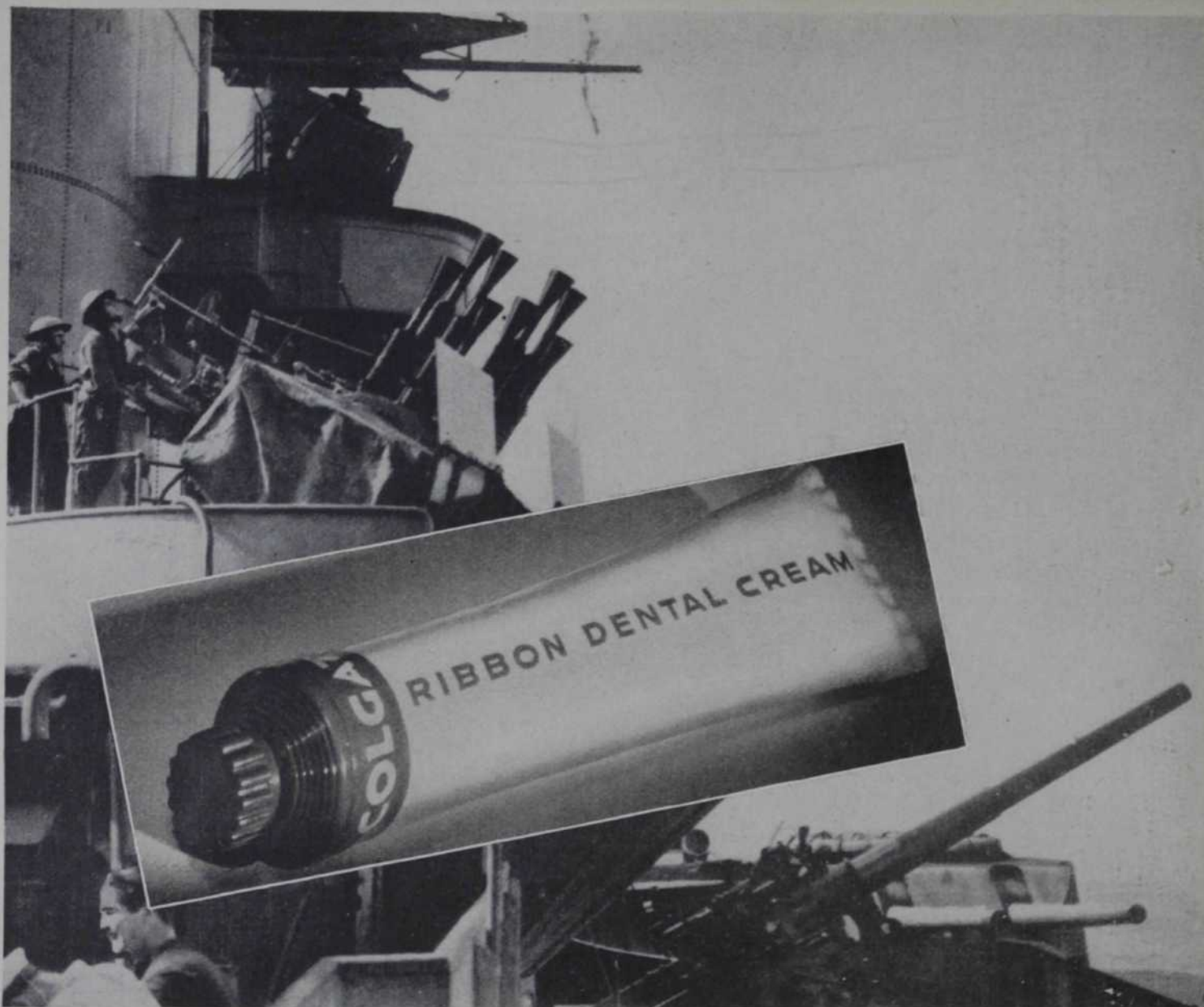
This "little black box" is not the invention of "Connecticut" or any other one company. It merely represents the practical application of advanced electrical and electronic principles, many of which are being learned from wartime development. "Connecticut" development engineers will have much to offer the manufacturer who would like to see the magic of "a little black box" applied to his product, or to machines in his plant.



**CONNECTICUT TELEPHONE
& ELECTRIC DIVISION**



MERIDEN, CONNECTICUT



This throw-away tube helps blast the Axis!

There is no critical material in the new collapsible tubes for tooth paste, shaving cream, and other necessities, made by the Celluplastic Corporation of Newark, N. J. But there is a critical stage in the manufacture of these all-plastic containers that is protected by York air conditioning.

York is very proud of this installation . . . because it is helping to save *tons and tons* of tin . . . tin

that is vital to the machinery of Victory. York Ice Machinery Corporation, York, Pennsylvania.

• • •

NOTE: Production of Celluplastic tubes is being expanded as rapidly as possible, yet there are many manufacturers still unable to get them. Thus, metal tubes will remain on the market for a time. Be sure you do not throw away any of this precious lead and tin that can shorten the war, save American lives.



YORK REFRIGERATION AND AIR CONDITIONING FOR WAR

HEADQUARTERS FOR MECHANICAL COOLING SINCE 1885

BREEZE SHIELDING GUARDS VITAL RADIO
COMMUNICATION AGAINST INTERFERENCE

25 MILES —on a Still Night

Huge African signal drums can roll their code messages across 25 miles of jungle on a still night—but they are ineffective in the face of thunder, high winds, or heavy rains.

Modern radio communication too has problems of natural interference—static caused by the absorption or radiation of high frequency impulses. Breeze Radio Ignition Shielding, pioneered and developed by Breeze, effectively guards against such interference, makes possible clear and dependable transmission and reception of messages. Flexible Shielding Conduit is manufactured in a variety of types and materials in accordance with specifications of the Government Services, while a wide range of sizes permits a selection to meet practically every shielding requirement.

Through its years of experience in the field, Breeze has acquired the engineering and production know-how to solve specialized shielding problems of all kinds.



BREEZE CORPORATIONS, INC.
NEWARK, NEW JERSEY

Through the Editor's Specs

War's spiritual values

YOU'VE probably noticed, as we have, a remarkable number of stories describing how American soldiers and sailors have prayed in battle or when their lives were otherwise endangered. Men who have spent weeks on a life raft in the Pacific have testified repeatedly to the comfort derived from reading the Bible. Marines at Guadalcanal, soldiers in the Philippines and many others have described their faith in Divine help. "There are no atheists in foxholes," a sergeant is quoted as saying on Bataan.

Out of that experience has grown a new service and a new edition of the Bible especially designed for the Merchant Marine. Prepared by the American Bible Society and carrying a foreword by Admiral Land, these volumes will be placed in life boats and rafts. Each will be protected by an envelope of stout oil paper, lined with lead and cellophane, able to withstand immersion for several days.

Already the Society has received orders for equipping the ships of some 35 companies, and it is estimated the orders will finally reach 20,000 volumes. The mothers and fathers of boys in the Merchant Marine will be glad to know about that.

Political shell game

THE ARKANSAS utility regulating commission has ordered the Arkansas Power and Light Company to refund to its customers \$625,000 representing net returns which the commission held was in excess of the rate which it believed to be "fair and reasonable." This sum was the equivalent of the company's 1942 "excess profits" tax.

The courts, to which the company appealed, upheld the order, which is retroactive to Jan. 1, 1942.

Here is a novel procedure in profit regulation. The government agency waits until the closing months of the year to determine how much profit should be allowed. This hind-sight policy, if generally applied, would be fatal to private initiative. Also, in 1941, electric utilities paid \$45,000,000 excess profits tax, and the estimate for 1942 is \$110,000,000. As the refund wipes out excess profits as defined in the Federal Revenue Acts, the Federal Treasury will have

something to think about. If this policy becomes prevalent, it will have to put a sales tax on electric light bills.

Psychological warfare

ONE OLD American prerogative we can give up for the duration—at least, while at work—is griping about things in general. This is true in office and factory.

Getting rid of this ancient custom brought some traditional American ingenuity into play at the Victor Division plant of Radio Corporation of America. Walter Markowski, packing engineer, improved on an idea used in some Army camps and installed a "gripe box." The box has a slot into which workers are urged to deposit unsigned statements of what's wrong. Over the invitation is the sign:

"Stop Belly-Aching."

Not a single genuine complaint has been made since the "gripe box" was built, although one girl suggested that electric fans be used to blow out the hot air caused by powder-room sessions, and another used the "gripe-box" to get a date. Otherwise, beefing is at a minimum, for when anybody starts it, a fellow-worker says:

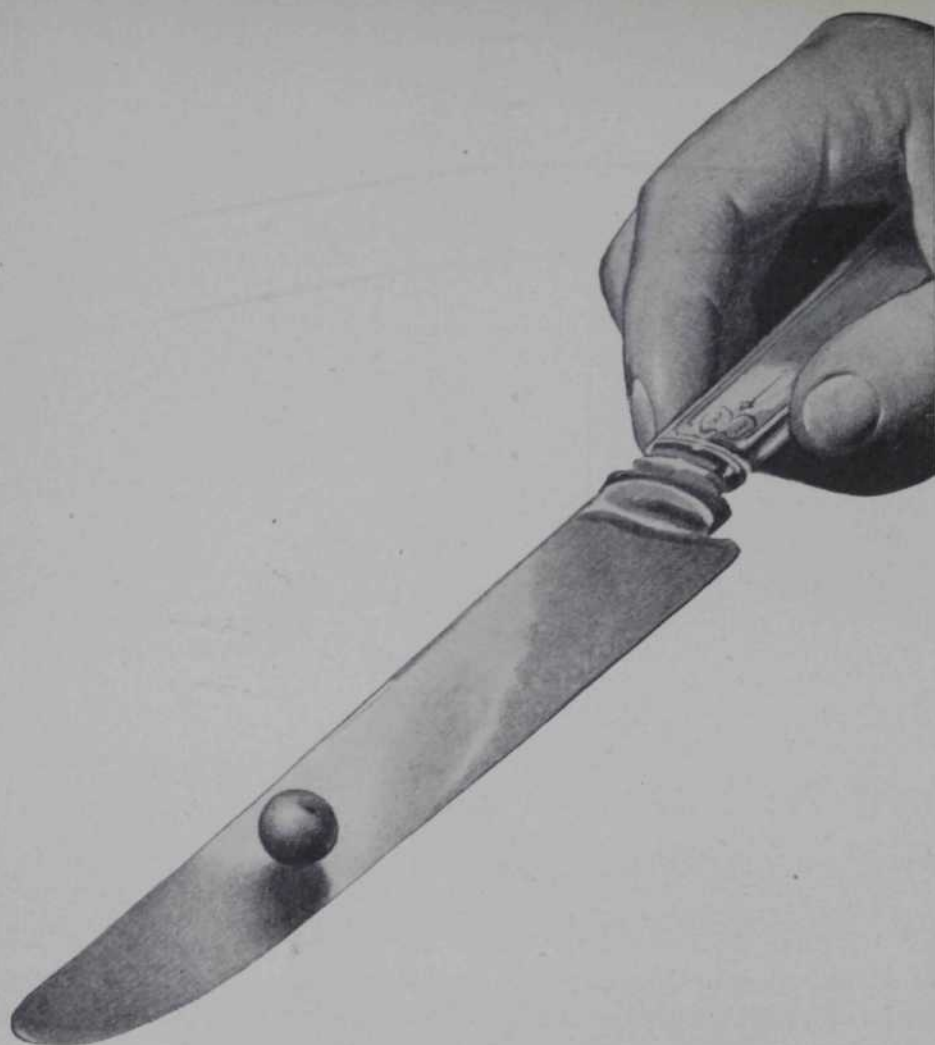
"Go put it in the gripe box!"

The argument stops—and work starts.

Anyway, the farmer lost

THERE'S a fellow in our office whose job it is to read the *Congressional Record*. He says he likes the Appendix. That's the back part where congressmen put in newspaper editorials and magazine articles, and occasionally a speech, designed for home consumption, but not made on the floor. Anyhow, our man usually discovers at least one nugget which cheers him up, and the other day he came around, pleased as Punch, exhibiting an "extension of the remarks" of the Hon. Noah M. Mason of Illinois. It wasn't the Congressman's indignation that intrigued, but a quotation from the Supreme Court decision upholding the constitutionality of the law applying a 49-cent-per-bushel penalty on every bushel of wheat a farmer grows upon each acre of wheat he seeds in excess of his quota allotment. The Court solemnly stated:

"Had the appellee (the farmer) chosen to cut his excess and cure it, or feed it



How far can a pea roll?

FROM the fertile valleys of the Pacific Northwest to cities on the Eastern seaboard is a distance of over 3,000 miles. That's how far a pea can roll—when Northern Pacific Railway gives it a start!

Last year, carload after carload of peas—fresh, fresh-frozen, dried and canned—rolled to market in Northern Pacific cars . . . from Washington, Oregon, Idaho and Montana. Many of these peas were grown from Washington and Montana seed peas distributed by canneries to farmers along Northern Pacific tracks.

This year, thousands of *additional* acres of peas will be planted in our territory—peas that will roll swiftly to our armed forces, civilians and Allies over the "Main Street of the Northwest"!



"MAIN STREET OF THE NORTHWEST"

chant submitted his account books to Van Twiller, governor of the province, who heard the arguments on both sides, poised both books in his hands, counted the pages, and cogitated deeply in a great fog of tobacco smoke. Then he announced that the accounts were in precise balance. Each litigant was to give the other a receipt in full. The court costs would be paid by the constable—i.e., the taxpayer.

There isn't much new in the news these days.

Russia's managers manage

AN enlightening example of how far Russia has departed from the ways of communism, is provided by Mr. Edgar Snow in a recent *Saturday Evening Post* article. Mr. Snow visited the Vladimir Ilyitch factory in Moscow which for four consecutive months had won first place in the munitions industry competition against all contenders in the Soviet Union.

After talking with Director Pregnesky of the factory, Mr. Snow reported:

Probing for Pregnesky's secret of success, I asked if he had some kind of workers' advisory council helping run the plant. "How do you share your responsibility for factory administration?" I asked.

"There is no sharing," he replied. "I am solely responsible here for the operation of the factory. No, there is no workers' advisory council. We find it neither necessary nor desirable. The workers do their jobs and I do mine."

Do the labor unions have no voice in the direction of your plant?

"No," he said. "They have other work to do. They cannot interfere with my management in any way."

But who are your directors? Who fires you if you fail to make the grade?

"The commissar who appoints me is my board. But he doesn't tell me how to manage the plant either. For that matter, neither does a good board in America interfere with their manager, and that's why you have efficient factory operation there."

It's a big fraternity

ONE of our favorite contentions is that, despite fast communications and all the Government's publicity men, a large number of American citizens still do not get the straight of actions set up in Washington until months—and sometimes years—after the policy has been put into effect.

A letter from a gentleman in Maryland, not a stone's throw from Washington itself, bears this out.

"Dear sir:" he wrote. "Could you send me a booklet covering the hauling of livestock from Cape Charles, Virginia to Philadelphia, Pennsylvania, by truck? Would I have to join the I.C.C.? If so, how much would it cost and what are the hours I have to operate under it?"

For the benefit of thousands of others who are caught in the fog of Washington directives, it should be noted that the Maryland farmer *will* have to "join" the I.C.C. if he expects to get far in the trucking business.

Also, before he knows it, he might have to "join" the N.L.R.B., the W.L.B., the O.D.T., and any number of other government agencies.

**"We could
lose this War
between 5 p.m.
and 7 a.m."**



JOHN BLAZEK, the author of this remarkable statement, is the production manager of a war-material plant in a midwestern city.

IM no pessimist. But I'm telling you the hours between sunset and sunrise can be the most critical hours of this war. Not on the battlefronts, but in the factories and shops where they're making the things our boys must have to win the final victory.

"My factory has been working on important war contracts. Daytime production was as good as could be expected. But night production was 40% behind schedule. The employees worked just as hard. They seemed more tired than the day crew. But they weren't making the grade.

"I knew a dozen things might be wrong, but I had an idea one trouble might be the lighting. So I called in a lighting man and put it up to him.

"He made a careful study. Then he showed me what *was* wrong with the lighting, particularly as it affected the night workers. I was willing to try *anything* that might help, so we made the changes he recommended. Today, under the new improved lighting, our night shift workers are running neck and neck with the rest.

"I don't know how many other plants have been having this same trouble. But if production generally is lagging behind on the night shifts—those hours between 5:00 P. M. and 7:00 A. M.—*we could lose this war*. Unless we do something about it right away.

"As one production man to another, all I know is, if you're having night shift trouble, one thing you'd better

check up on is your lighting. It may help you. It certainly helped us."

GENERAL Electric has a staff of experienced lighting men who visit war factories and give free lighting advice. Their job is to get the necessary results with the least possible use of critical materials. They're on the alert for things like glare, shadows, and dirt, that may slow down production without your knowing why.

If you are running a war factory, won't you have your lighting checked? Call the nearest G-E lamp office. Or see your electric service company or your G-E lamp supplier. Or write General Electric Company, Nela Park, Cleveland, Ohio.



G-E MAZDA LAMPS

GENERAL  ELECTRIC

"Soldier of Service"

"The Voice with the Smile" has always been a part of the telephone business and we want to keep it that way.

Even under the stress of war, the men and women of the Bell System are as anxious as ever to see that you get friendly, courteous service. And they are anxious, too, to give the fastest possible service—especially to those who need speed to help win the war.

You can help them by not using Long Distance to war-busy centers unless it is absolutely necessary. For all your patience and understanding so far, many thanks.

WAR CALLS COME FIRST

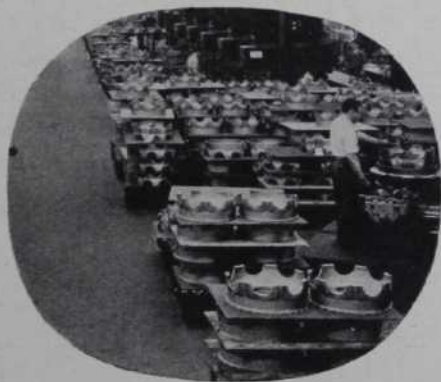
BELL TELEPHONE SYSTEM



HOW MUCH OF YOUR OVERHEAD *is underfoot?*



Probably about $\frac{1}{3}$ ¢ per sq. ft.
in 20 years — If your plant has a
heavy duty KREOLITE Wood Block Floor!



KREOLITE Kountersunk Lug Wood Block Floors help keep this typical war production plant dustless, easy to keep clean, safe. Otis Elevator Company, Aero. Div. Walter Kidde, Constructors, Inc.

Is floor maintenance on your plant superintendent's expense budget year after year? Are repairs necessary every time you move a machine? Does your floor fail under heavy traffic loads? Do you reinforce aisles that get heavy traffic?

KREOLITE Wood Blocks can keep these costly items off your overhead budget. In 1923, a manufacturer of heavy farm machinery installed 146,294 square feet of KREOLITE flooring. Their records show only \$500 spent for repairs in 20 years. That's less than $\frac{1}{2}$ ¢ a square foot! It includes material and labor. This firm has reordered to the tune of more than *five million* square feet for new installations since that time.

KREOLITE Kountersunk lug blocks are *knitted* together by KREOLITE pitch filler or binder coats into one resilient, cohesive floor area. *No KREOLITE Floor has ever worn out!*

KREOLITE Wood Block Floors absorb noise and vibration, are comfortable to work on, protect dropped tools and parts. A final coating of our exclusive KREOLITE Jennite makes the floor spark-proof, skid-proof, safe.

Specify

KREOLITE... Accept No Substitute

THE JENNISON-WRIGHT CORPORATION

TOLEDO, OHIO • 23 Nation-Wide Offices

Comfortable To Work On • Dustless, Easy to Clean

Absorb Noise, Cut Vibration • Low Maintenance

Protect Dropped Tools and Parts

Durable, Spark-proof, Skid-proof, Safe

Firm Base for Machines • High Insulation

Quick to Install, Easy to Replace



KREOLITE WOOD BLOCK FLOORS

KREOLITE RAILROAD SWITCH & INDUSTRIAL TRACK TIES • PILING • BRIDGE & DOCK LUMBER



**Tough? These new SYNTHETIC RUBBER soles
wear twice as long as leather!**

EVERY general knows that a soldier is no tougher than his feet. That is why, back before the war, both the Army and Marine Corps made rubber soles and heels "regulation" on field shoes—because tests proved good rubber long outwore any other material on the march. And it is easier on the feet than old-style hobnails.

But when Uncle Sam began calling millions of men to the colors, Goodyear foresaw that our troops might eventually be deprived of these longer-wearing, foot-cushioning soles as the nation's rubber reserve dwindled. So many months ago we set our Research Department the task of developing comparable soles and heels from Chemigum, Goodyear's own synthetic rubber.

Now after many trials Goodyear is ready with Chemigum soles and heels that not only wear as long as natural rubber—*more than twice as long as the*

best leather—but possess a plus advantage not found in either rubber or leather. This is Chemigum's impermeability to acids, oils and greases that cause both leather and rubber to soften and swell. As a result, Chemigum soles and heels are definitely superior for wear in engine rooms, auto repair shops, gasoline stations, oil fields, barnyards and in many industries.

Thus once again Goodyear has anticipated an emergency and is ready with the answer. Should the rubber shortage force the Army to give up its present shoe construction, Chemigum soles and heels can be produced as rapidly as adequate quantities of this synthetic rubber can be made available. And with the expanding output of new synthetic plants, built as part of the government's rubber program, these better shoe products will ultimately be available to all.



GOOD YEAR
THE GREATEST NAME IN RUBBER

Chemigum—T. M. The Goodyear Tire & Rubber Company

Planning Post War Plant Expansion?



Investigate the Resources and Industrial Advantages of **WEST VIRGINIA!**

West Virginia is playing a big part *today* in industry's after-the-war plans for expansion! Rich natural resources and convenient location recommend it as the "State of Industrial Opportunity." Here are excellent plant sites, efficient transportation, skilled and unskilled native-born labor, a healthful climate the year 'round. Write on your business letterhead for complete information about West Virginia—or for specific data about any particular localities that interest you.

NATURAL RESOURCES



Bituminous coal, silica, gas, petroleum, water power and hardwood timber are all available here for wide industrial use and development.

TRANSPORTATION



West Virginia's network of rails, highways, and rivers permits overnight shipments to Eastern, Northern, Southern and Midwestern markets.

RECREATION



West Virginia's State Parks and Forests are convenient centers for wholesome, invigorating recreation—relaxation that revives tired minds and bodies.

WEST VIRGINIA PUBLICITY COMMISSION
Box 7, Capital Building
Charleston, West Virginia

*Coal and Chemical Center of
the Nation*

Nation's Business for March 1943



On the Hazards of Quoting Scriptures

THE advocates of bigger spending as a post-war panacea are taking in more and more territory. The bigger the job, the bigger our spending budget; and to justify it, our zealous ones now resort to Holy Writ for text and authority. Three top speeches on the subject recently have used illustrations from the Bible. One group of Yogi-tycoons, when questioned (upon request) by Bruce Barton, moved further forward in the Book, from the Old Testament with its ever-normal granary, to the four Gospels.

What did the master do, they replied pontifically, with the money the servant was afraid to invest, who buried it to save it whole? He took it away from him; therefore, the lesson is plain for our times, when bankers and business managers hesitate to risk the savings others entrust to them, our Government should likewise take this money, by taxing or borrowing, and spend it to relieve unemployment and to create prosperity.

That sounded reasonable, but we remembered an old lawyer's advice, who once said he had learned to his sorrow not to accept a sentence out of its context. So we reread the Parable of the Talents in the light of this 1943 interpretation.

Right away we discovered why the man with money and goods turned them over to his agents. He was about to travel "into a far country." Selah!

In distributing his wealth, you will recall he dispensed it not in equal amounts on the theory of every man a king, but to each "according to his several abilities"; ability, we suppose, proved by experience in making money work, and turn over, and multiply. Later to one servant who expressed doubt as to his ability to invest wisely and profitably, the master chided, "at least thou oughtest put my money with the exchangers." This seems to indicate a reliance on those with a special knack for managing and getting money into productive jobs.

Likewise the master went all out in praise of the two who made a profit, the "good and faithful servants" who returned the original investment with a dividend thereon, even up to 100 per cent. In those days, obviously, there was an incentive for profit and honor for him who made it.

But to hurry along to the point where the money was taken away from the cautious one, who felt the incentive not equal to the risk. After all, this is the nub of the parable used by the Keynesians in support of government taxing and borrowing and spending.

True, the master did take away the silver talent from the servant who dugged in the earth and hid it, but what did he do with it? He gave it to the one who had doubled his investment, the one who had taken the biggest risk and had made 100 per cent. And it was at this point that he called the 100 per center not a profiteer but a good and faithful servant.

It seems to the lay preacher that the choice of this particular parable is an unfortunate one for the deficit financiers, especially since the last line pictures an outer darkness and predicts that "there shall be weeping and gnashing of teeth."

To our discredit, we admit less knowledge of Holy Writ than is good for us. Nor have we forgotten Shakespeare's line, "The devil can cite Scripture to his purpose." So we shall leave Scriptural interpretation of our economic ills to our betters, taking refuge occasionally in Ben Franklin's, "He that goes a borrowing, goes a sorrowing."

Merce Thorne

FAST AND FLEXIBLE DELIVERY!

That's why **TRUCK-TRAILERS!**

ARCADY FEEDS ARE SHIPPED BY

ALL EIGHTY-FIVE products of Arcady Farms Milling Company, Chicago, are important factors in sustaining America at war.

And key factors in the feed business are fast delivery and flexibility to meet the varying needs of dealers and farmers. A wide variety of feeds must be available, without overstocking. Supplies must be fresh. Orders must have immediate attention. Dealers must be protected against prevalent price changes.

The 12-ton Fruehauf Trailers, pulled by economical 2½-ton trucks, which Arcady Farms began using six years ago, assure that kind of service for the thousands of Arcady Feed users in the mid-West. For instance, all deliveries are over-night from Chicago . . . they took three to five days by rail.

CUSTOMERS PROFIT, TOO

Dealers and customers profit, too, for they get carload shipping rates, however small the shipment.

As for Arcady Farms, Truck-Trailer service has brought a big increase in sales volume and new dealer accounts . . . not a few of which grew out of letters like this: "I see your Trailer going past my store. Please send your catalog."

Arcady Farms' Fruehauf Trailers get hard usage . . . about 75,000 miles a year. Repair costs? Only lubrication, painting and nominal maintenance.

Thousands of companies, in scores of industries essential to the war, many of them with unusual hauling problems, have found Truck-Trailers to be the complete solution.

World's Largest Builders of Truck-Trailers

FRUEHAUF TRAILER COMPANY • DETROIT

Sales and Service in Principal Cities

TRUCK-TRAILERS CONSERVE RUBBER, STEEL, GASOLINE, MOTOR POWER . . . and thus Help America

SMALLER TRUCKS USED—Since a truck, pulling a Trailer, can haul as much or more than a far bigger truck can carry, the large units are released for military work for which they are essential.

RUBBER AND STEEL CONSERVED—A Truck-and-Trailer combination uses about 16% less weight of tires and 25% less steel than do the two trucks required to carry the same payload.

FEWER TRUCKS USED—Many companies, previously operating fleets of trucks, replaced some of them with Trailers . . . and now move the same tonnage with fewer power units. "Shuttling" saves still more trucks.

GASOLINE CONSERVED—A truck, with a Trailer, uses far less fuel than the one large truck or several small trucks it replaces.

Convert

. . . your present trucks into tractors, to pull Trailers . . . and they will do twice . . . even three times . . . as much work as they've been doing. Conversion is simple and inexpensive. Ask your Fruehauf Branch about it.

REG. U. S. PAT. OFF.

FRUEHAUF TRAILERS

"Engineered Transportation"



TRUCK-TRAILER TRANSPORT IS DOING AN ESSENTIAL JOB FOR ALL AMERICA

THE U. S. TREASURY AND SMALL NON-WAR BUSINESS will pay the bill for the 48-hour work week ordered by President Roosevelt.

The Treasury will pay through loss in tax collections. Many small non-war enterprises will be forced out of business.

In war plants the overtime bonus required by the President's order will be added to the cost of producing arms.

War work's only customer—the Government—will pay the bill.

Big non-war business already caught in the squeeze between high operating costs and excess profits taxes will be able to add the bonus to operating cost and, in effect, take it out of excess profits taxes.

Thus the Treasury—i.e., the taxpayers—again will pay the bill.

The problem will be tougher for the little business man who is covered by the wage-hour law and has been operating on a 40-hour week in a non-war line.

The Presidential order sends his work week up to 48 hours. Overtime must be paid for the last eight. That means a 30 per cent increase in his wage costs.

Many will find the labor increase will more than absorb the profit margin. The only out for them is out of business.

► Manpower is Washington's biggest problem and its most confused one.

The War Manpower Commission does not know:

1. If we are to have a big army, a little army or a medium sized army.
 2. If it is to be allowed to draft married men with children before single men are all called—or at all.
 3. If it is going to be required to recall, or furlough, men in the army or in training, for farm work.
 4. If the draft age is to be raised above 38, or dropped below that figure.
- Congress is showing as much interest in these problems as is the Administration.

If Congress decides to lay down the terms, Congress will be running the war. For whoever runs manpower runs the war.

► Be wary of statements to the effect that the bill before Congress to draft men and women for war work "hasn't got a chance of passing."

This letter informed readers last November that compulsory manpower controls were in prospect for February or March.

The Austin-Wadsworth bill was introduced in Congress February 8.

In an October fireside chat Mr. Roose-

MANAGEMENT'S

Washington LETTER

A last minute roundup by a staff of Washington observers of government and business

velt told the Nation that the principle of selective service "could be used to solve any manpower problem."

The present bill would use the selective service system.

► Increased allowances for dependents of married men called into service are in the works.

For unless Congress interferes, fathers are going to be called in large numbers not next summer, but right away.

► "If I don't get rid of a lot of this red tape I'll never get the job done."

Those are the most encouraging words business men have heard from O.P.A. Director Prentiss Brown.

Equally encouraging to business have been Brown's declarations that record-keeping, which almost swamped many retailers, will be cut to a bare minimum.

Privately, Brown reports finding O.P.A. sub-executives reluctant to change tactics.

They admit neither past mistakes nor error in past procedures.

The former Michigan senator has made no move to clean house of these sub-heads.

Indications point the other way—toward his keeping the central O.P.A. organization in Washington nearly intact.

Critics of O.P.A. say these are the people who have wrapped price controls in red tape, helped create the conditions that cost Henderson his job. Same forces may affect Brown same way, they contend.

Brown's announcement that he will try to control an orderly rise, rather than clamp price lids tightly, has been severely criticized within O.P.A.

But the orderly rise he outlined is the best Brown hopes for.

► A big dish of ice cream builds a lot of morale.

Army and Navy agree on this. They use lots of it. That's why ice cream production won't be stopped, despite the coming

shortage of dairy products in this country.

The butter you eat this month might have come from South America. Recent U. S. imports include 22,000,000 pounds of it.

But imports on that scale will do little to ease our shortage. The butter production goal for U. S. this year is 2,-065,000,000 pounds.

▶ A ship bound for Africa, the Solomons, or anywhere else can carry as much food value in dehydrated form as nine ships would carry ordinarily.

That's why the Government is trying to multiply our vegetable dehydrating capacity to nearly seven times its present size within the next sixteen months.

The goal is 400,000,000 pounds a year. Huge expansion of facilities for drying milk and eggs also is under way.

Lend-lease orders for one month included 6,000,000 pounds of dried egg powder. That's a total of 288,000,000 eggs.

Even the traditional Army bean is being dehydrated to save shipping space. Also meats, cheese, fruits, soups, jams, even pumpkins for pie.

Food dehydration is a war baby, but it was born several generations ago. The process was used first in the Civil War.

▶ Black market meat usually is handled in unsanitary places. It might be harmful to health. So the Government says.

So the Government is telling the people.

It's the same story the Government told about bootleg liquor.

And the effect is about the same. Black markets have spread like wildfire. They present prohibition era problems all over again. There is no indication they will be any easier to handle. See "Price Control—Our No. 1 Riddle," Nation's Business, November, 1941.

▶ An unexpected effect of maintenance of union membership contracts is being watched closely by organized labor, management and government labor agencies.

It is reported to be cutting union membership in plants covered by this contract form.

Terms require that union members may drop out during the first 15 days, otherwise must remain in good standing to hold their jobs.

Employers are required to discharge employees certified by union officers as delinquent in dues.

In many cases where this has been done, the worker simply goes down the street to

the next plant and starts to work. Even though the second shop has the same form of contract, the worker is listed as a new employee, not covered by the union maintenance provision.

Wholesale transfers on this pattern, to avoid paying union dues, have been in progress in many places. War Manpower Commission's freeze orders will stop these transfers in the most critical areas.

▶ Leaf-shaped papers as well as high explosives have dropped out the bomb bay doors of U. S. planes flying over Japanese positions in the Aleutians.

Japanese characters printed on the leaves say:

"Before spring comes again the bombs of America will fall like the Paulownia Imperialis leaves, bringing misfortune and bad omen.

"The fall of one such leaf is a portent of the annihilation of the militarists. Its scattering means an accumulation of sorrow and misfortune."

▶ Travel rationing on trains and busses is out.

Nothing now in the picture indicates the slightest possibility of rations or priorities on either rail or bus passenger business.

That's the word from experts.

There are two reasons. First, because O.D.T. and the transportation industry have found voluntary travel restrictions highly successful.

Second, because of the complexity of handling rationed travel.

Who, for instance, would pass on the necessity of issuing a ticket to a hurried business man standing at the wicket, cash on the line?

Certainly not the ticket seller, say transportation men. He just isn't qualified.

▶ No. 1 worry of big U. S. air lines was hit in the bulls-eye by Congresswoman Clare Boothe Luce in her maiden speech.

"Unlike ourselves," she said, "the British have wisely preserved everywhere the skeleton of their commercial carrier routes around the globe.

"On the very day the shooting stops, the British naturally desire to be in a position to put muscles and flesh on their international airways system.

"And perhaps even fat in some places—with lend-lease planes."

Fact is that the British aren't waiting for the shooting to stop.

Right now British Overseas Airways is operating regular commercial service between our East Coast and England—with planes taken away from American lines and

assigned British Overseas under lend-lease.

► This Congress hasn't even started to upset applecarts yet. But watch it, along about the time the ice goes out.

A veteran on Capitol Hill who has seen many Congresses come and go, says he has never seen one as hot under the collar as this one.

He describes new members as "wild horses" and old members, he says, have taken "a shot in the arm."

Significant is the clubbiness of the nine new Republican senators. They are bound together by the conviction that they represent a genuine and widespread revulsion at the polls.

They demand a voice in the highest party councils—and they are getting it.

Note the constant challenge to New Deal leaders in both houses. More important, observe the complete failure of the vote to follow party lines.

Why didn't the White House shoot the works for Ed Flynn? Because it wanted to conserve its strength for bigger battles which lie ahead.

► Events are shaping up for a showdown between Secretary of Commerce Jesse H. Jones, Reconstruction Finance Corporation head, and Milo Perkins, Board of Economic Warfare chief.

Back of Perkins is Vice President Wallace, who master-minded B.E.W.'s far-flung and often mysterious negotiations with foreign governments.

State Department, irked by B.E.W.'s intrusion into its field, is a bystander in the Jones-Perkins fight.

Trouble is that B.E.W. draws its money through Jones' R.F.C. but doesn't have to account to anyone for expenditures.

Jones feels he holds statutory responsibility for these funds and is entitled to know where the money goes.

The whole issue is wrapped up with Vice President Wallace's presidential ambitions, according to Capitol cloakroom low-down.

The bickering has been extended to field offices in foreign capitals where both agencies operate—particularly in South America.

► Friends of Elmer Davis fear he has lost his big opportunity to straighten out the Office of War Information tangle.

O.W.I. remains an odd assortment of loose ends, with much internal friction and lack of hard-boiled, central authority.

Davis lost a very important round when Rubber Administrator Jeffers successfully

challenged his authority to control official utterances. This was the first break in the Davis line.

Uproar in Congress over O.W.I.'s ritzy new magazine, "Victory," indicates which way the wind is blowing.

► New Jersey has just adopted a new kind of rationing which, it gently hints, Washington might emulate.

It has set up an emergency commission whose duty it is to keep a close check on state expenditures and draw a sharp line between essential and non-essential spending.

The idea is that the commission will knock off every political spending bill that pops up in the legislature. Essential services will be assigned priority ratings and available funds will be dished out accordingly.

This "rationing" of the taxpayers' dollars is the brainchild of the New Jersey Taxpayers Association. It drew impetus from expectation that state revenues will dwindle this year—a \$16,000,000 loss in gas taxes alone.

TOO LATE TO CLASSIFY: There won't be enough seed to plant the 300,000 acres of hemp planned by Agriculture Department... War Manpower Chairman McNutt believes in hearty breakfasts. His own: orange juice, oatmeal with cream, a soft-boiled egg, buttered enriched toast, orange marmalade, coffee.... You can buy a license to use confiscated Axis patents for \$50. Some of them cost millions in development.... Washington description: "A committee is a group of men who keep minutes and waste hours".... Got any German securities in your portfolio? They're worthless. You can write 'em off, says the Bureau of Internal Revenue.... Pump broke in the country home of Undersecretary of State Sumner Welles so, according to a society note in war-jammed Washington: "They moved to their big, long vacant house on Massachusetts Avenue."

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IN CANADA, DARLING BROTHERS, LIMITED, MONTREAL, P. Q.

A WAR-TIME REPORT to all Guardian Policyholders



THIS YEAR, to avoid adding to the already heavy war-time burden of the postal services, we are not mailing our customary annual report to Guardian policyholders, but are using this publication instead to place before you important Company highlights for 1942.

Two years ago, in my report to you, I said:

"It is my conviction that the life insurance industry will make a substantial contribution to our national defense and national security . . . Just as in normal times, so in periods of crisis life insurance will continue to provide food and clothing, shelter and education, protection for those who need it most. And in addition to providing this individual and family security, the dollars paid in to companies will be loaned to government and to industry to help produce that defense which this country unitedly demands."

Your Company's operations in 1942, as in 1941, were directed to those ends as follows:

PAYMENTS TO AMERICAN FAMILIES

Continuing the steady flow of benefits to policyholders and their beneficiaries started in 1860, The Guardian paid out last year \$9,830,000 because of claims arising from deaths among our policyholders, here at home and in our Nation's armed forces, and in benefits to living policyholders.

INVESTMENTS FOR VICTORY

Investments in U. S. Government Bonds by your Company in 1942 showed a net increase of \$9,258,000, bringing our total holdings of such securities to a new record high of \$27,064,000. These funds loaned to our Government in 1942, together with \$2,595,000 used to purchase bonds of our neighbor, Canada, aggregated 84% of all life insurance premiums paid to The Guardian last year.

In addition to this direct contribution to the financing of the war, your Company invested \$5,852,000 in mortgages in defense areas, mainly to alleviate critical housing shortages for essential war workers.

Total assets of The Guardian rose in 1942 to \$165,703,000, an increase of \$8,986,000.

ACCUMULATIONS FOR FUTURE NEEDS

Life insurance has always constituted both a strong bulwark of protection for dependents and a ready means of accumulating funds for future spending.

Total insurance in force with The Guardian increased by \$13,517,000 during 1942 to a new record high mark of \$529,167,000. This provision for the future made by our policyholders represents a vital contribution to the high morale with which they and their families face the future.

As security for the future payment of all claims arising under these policies, your Company maintains legal reserves in the amount of \$145,463,000. As additional security, the Company has Surplus Funds in the amount of \$7,002,000—\$705,000 more than a year ago.

CONTRIBUTION TO OUR ARMED FORCES

The Guardian's contribution to the Nation's armed forces amounted at the end of the year to 43% of all the men under age 45 employed in our Home Office organization and 36% of those in our Field organization.

OF THEIR OWN FREE WILL

100% of The Guardian's Home Office personnel have pledged regular purchase of War Bonds through Salary Deductions every payday. In addition, Guardian Fieldmen participated fully in the sale of War Bonds to the public through establishment of Salary Deduction Plans in industries.

War Stamps are on sale in all Guardian Agencies and a highly creditable total has been sold in this way, and all our associates, both in the Field and at the Home Office, have cooperated fully in all Civilian Defense and Red Cross Blood Donor activities.

★ ★ ★

These are, in brief, some of the ways in which your Company, during 1942, has endeavored to fulfill its twofold responsibility—cooperating with our Government in waging a victorious war and maintaining unimpaired that essential protection of American families which is an integral part of our war aim.

This report is not designed as a financial statement. A copy of the financial statement may be had from any Guardian Office.

JAMES A. McLAIN, *President*

THE GUARDIAN LIFE

INSURANCE COMPANY OF AMERICA

Home Office: 50 Union Square, New York City

GUARDIAN OF AMERICAN FAMILIES FOR 83 YEARS

Can We Expect a Boom?

1815

1865

1918

} Three previous wars have been followed by periods of prosperity. Unless conditions are radically different today, history will likely repeat. How different are they?

194- ?

By HAROLD G. MOULTON and KARL T. SCHLOTTERBECK

EARLIER in the present war, there was a widespread belief that the immediate aftermath of the struggle would inevitably be an economic collapse.

Curiously enough, as the war has continued, a contrary view has been developing—that the stage is being set for a post-war boom.

To determine which of these views is more nearly correct, the writers studied the business trends in the United States after the War of 1812, the Civil War and the First World War. Then we attempted to find out how conditions at the end of this war are likely to differ from those at the end of the First World War and to gauge the economic outlook during the first two years or so after hostilities end.

The facts reveal that immediate collapse has not always followed former wars. In every case there has been:

1. A few months of hesitancy.
2. Then a year or more of active business.
3. A relatively short period of trade and financial readjustment.
4. A succeeding period of prosperity extending over several years.

Let's consider that more fully.

The War of 1812 coincided with the closing years of the Napoleonic Wars in Europe.

Early in the Napoleonic Wars, the United States had enjoyed unusual prosperity; export trade and the ship-

building industry were enormously stimulated.

Later, embargo and non-intercourse acts seriously disrupted both these industries. This, in turn, led to the development of many new American industries—iron works, foundries, rolling mills, textile factories and other manufactures. The war's end, therefore, found us with a greatly expanded manufacturing industry, and seriously depressed agriculture, international trade, and shipping.

During the war, the banking and financial structure had deteriorated, the public debt had increased, and serious inflation had occurred.

But, immediately after the war, demand for consumer supplies led to a replacement boom. By autumn, 1816, this boom had resulted in congested markets and the import trade suffered a severe temporary setback. Export trade, however, continued to expand and agriculture revived as a result of European purchases. Shipping also revived.

In manufacturing, our infant industries, unable to meet European competition, suffered acute depression for several years.

But the trade reaction of late 1816 proved short-lived and the expansion movement continued until May, 1819, when it was ended by a financial crisis, apparently rooted in the excessive speculation in agricultural and urban real estate. That depression lasted roughly two years—both in the United States and abroad. Recovery began in the spring of 1821 and gradually resulted in a prosperity period which did not end until the spring of 1825.

Thus only two years out of the first decade after the Napoleonic Wars were years of serious depression in the United States, and these did not come until four years after the war.

The Civil War wrought severe maladjustments in the economic organization of both the South and the North.

At its end, half of the nation was prostrate and the balance disorganized. The post-war outlook appeared anything but promising.

The business recovery which began shortly after the peace was based primarily on the replenishment of stocks of goods. Even the South participated in this replacement boom.

Business activity continued at a favorable level throughout 1866 but, by the end of that year, wholesalers and retailers foresaw depression. Heavily stocked with goods, they cut prices in an effort to reduce inventories.

Two major influences were responsible for the moderate trade depression of 1867-68: (1) the great increase in the supply of consumer goods, and (2) the decline in funds available for spending.

Industrial expansion continued. Construction increased rapidly. Agricultural settlement was greatly extended. After 1868 came a boom that embraced all types of economic activity. Although accompanied by periodic speculative excesses in securities and commodities, including gold, this was one of the great development periods of American history.

To sum up: in the first eight and a half years after the Civil War, six and one-half years were highly prosperous.

The World War affected the economic life of the nation somewhat differently than did the Civil War. No section suffered devastation; there was no destruction of private wealth; no demolition of plant and equipment. On the other hand, there was a greater conversion from peace- to war-time pro-

DR. MOULTON, president, and MR. SCHLOTTERBECK, staff member, of the Brookings Institution, have recently completed an extended study of post-war business trends. For a more complete report on this same subject see "Collapse or Boom at the End of the War," published by Brookings Institution, Washington.

Replacement Boom - Spring 1815-1816



Expansion - 1817 Spring 1819



Recovery and Prosperity - Spring 1821 - Summer 1825

Hesitancy
Feb. 1815
Spring 1815

Depression - Spring 1819 Spring 1821

Replacement Boom - Sept. 1865 - Dec. 1866



Industrial and Railway Expansion - Jan. 1867 - Dec. 1868



General Prosperity - Jan. 1869 - Sept. 1873

Hesitancy
April 1865
Aug. 1866

Trade Recession - Financial Difficulties - Jan. 1867 - Dec. 1868

Replacement Boom - Apr. 1919 - May 1920



Recovery and Prosperity - Late 1921 - Oct. 1929

Hesitancy
Nov. 1918
Mar. 1919

Financial and Trade Collapse - June 1920 - Late 1921

BUSINESS TRENDS AFTER PREVIOUS WARS

duction, and a greater shift of manpower to abnormal pursuits.

For a few months after the Armistice, business was uncertain over the probable trend of prices. The two main questions were: (1) Are prices inevitably going to fall, and should we, therefore, wait before making commitments for expansion? (2) Is it possible to go forward with an extensive rehabilitation and reconstruction program on the basis of the existing high costs?

The suspense period lasted until the beginning of April, 1919. By that time the view was crystallizing that it would be possible to expand on the basis of existing costs and prices.

The curtailment in domestic consumption during the war had resulted in great shortages in consumer commodities. The first stage of the upswing involved the filling of this void. The boom reached its peak in May, 1920. Several primary sources of disturbance combined to end it.

First, as prices began to rise, an extraordinary speculation in inventories developed. Within a year, production was running beyond consumption and manufacturers, merchants, and dealers were rapidly accumulating stocks of goods. As a result of the expanding volume of production and the enormous increase in prices, credit resources ran short. Advancing prices also restricted consumer purchasing power as wages failed to keep pace with advancing prices.

In May, 1920, numerous retail establishments—facing the so-called "buyers' strike"—announced material horizontal reductions in prices. Almost immediately cancellations of advance orders ensued. This in turn quickly brought a curtailment of production and a consequent decrease in employment.

The bottom of the depression was reached in a little more than a year, and recovery began in about 18 months. Autumn, 1921, showed evidences of improvement, and the spring of 1922 ushered in a new expansion movement.

Although there were short trade recessions in 1923 and again in 1924, and a moderate depression in 1927, the period from 1922 to 1929 was one of the longest periods of prosperity this country has had.

In summary, the collapse after the First World War was preceded by more than a year of business boom. In fact we find that, of the first 11 years after the war, only 18 months brought depression.

This study indicates that, if history were to repeat in the transition period after this war, the trends would be roughly:

For perhaps six months there would be a moderate business recession.

Then would come rapid recovery

and expansion, accompanied by rising prices. This replacement boom would end in a little more than a year in a collapse of prices and an acute but relatively short depression.

To determine if history is to repeat itself we must get down to particulars. Analysis of current war-time developments reveals conflicting tendencies. Emphasis on one group of factors may lead to optimism, while preoccupation with another group is likely to result in forebodings. To arrive at a balanced judgment, we must carefully consider these contrasting tendencies.

The best way to clarify the situation is to compare the conditions likely to exist after this war with the situation after the First World War.

There are several favorable factors:

1. Retarded rate of demobilization.

After the last war, a year elapsed before the 4,000,000 men then under arms were demobilized. This time the rate of discharge will naturally be slower. Hostilities may cease in some areas many months before the war ends elsewhere; and in any case the forces will be widely dispersed. The policing requirements, pending the re-establishment of responsible governments, will doubtless be much greater; and there will be complex problems in relief, salvaging, and reconstruction. It would seem, therefore, that we may expect a staggering of soldier re-employment.

2. Reconstruction requirements abroad.

Many countries will have even greater needs than after the last war for food, medical supplies, clothing, raw materials, and machinery. Moreover, it seems reasonably clear that we shall be called upon to provide a substantial part of the raw materials and machinery required for the physical rehabilitation of devastated countries.

3. Domestic shortages of consumer goods.

The war's demands on our production resources will inevitably result in great shortages of many kinds of consumer goods. Replacement needs for consumer goods will be much larger than in 1918.

4. Deferred maintenance and replacement of industrial equipment.

Because war is reducing outlays for maintenance and replacements, rehabilitation requirements will for some time be abnormally large. Also war industry will face the problem of reconversion to peace production. Here, as with consumer goods, the requirements will undoubtedly be larger than after the last war.

5. Housing deficiencies. The accumulated arrearages in the housing field will be at least as great as those at the end of the First World War.

6. Relatively large purchasing power. Although the wealthy, middle income, and salaried classes generally will have greatly reduced incomes—as a combined result of high taxes and higher costs of living, wage earners will have relatively high current incomes. As compared with 1919, the purchasing power of labor will be high.

Other factors, too, will affect the ability to buy consumer goods. In many cases, private debts, and hence capital charges, will have been materially reduced. Government bond holdings will provide large reserves with which to buy consumer goods. Similarly, restrictions upon the volume of ordinary store credits are laying the basis for an expansion of store credit purchases after the war.

Farm incomes will doubtless remain relatively high in the early post-war years. Foreign need for American food-stuffs will be great.

7. A less extensive inflation. The rise in prices in this war has thus far been much less pronounced than in the First World War. In some countries the price level has been held nearly stable; and practically everywhere the inflation process has been relatively restrained. In consequence, an extensive downward readjustment of prices is not likely. Still, distortions in our price and cost structure may present a serious problem.

Among the unfavorable factors are:

1. Unprecedented employment problem. The task of providing peace-time jobs after this war will be much greater than in 1918-19, for three reasons:

First, the percentage of the total population in the armed forces will be substantially larger.

Second, the percentage of those engaged in war production will be much greater.

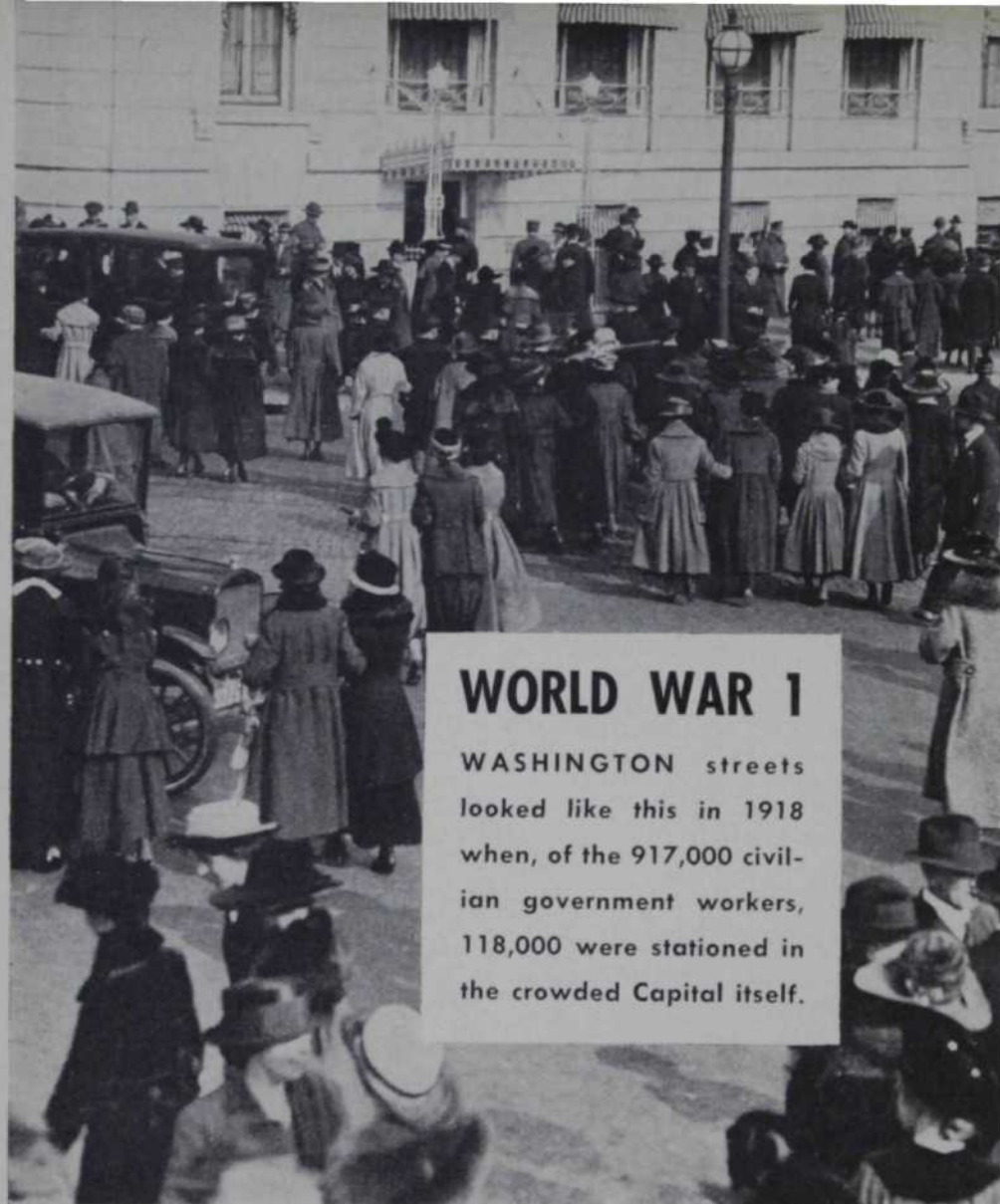
Third, the problem will be aggravated by the necessity of providing a much larger total number of jobs than existed at the outbreak of the war—to prevent a recurrence of chronic unemployment. A complicating factor is the extraordinary shifting of population to the great war production centers.

2. Difficulties in reconverting. The First World War ended before industries had been converted to war production on a wholesale scale. Moreover, if we are to use effectively the technical knowledge gained from the war, considerable time will be involved in installing new devices and equipment before the plants can absorb soldiers and war workers.

3. Possible shortages of working capital. Business enterprises, generally speaking, came out of the last war in a favorable financial position. Funds

(Continued on page 60)

Where



WORLD WAR 1

WASHINGTON streets looked like this in 1918 when, of the 917,000 civilian government workers, 118,000 were stationed in the crowded Capital itself.

AWEARY typist who came to Washington to help win the war flipped a handful of filing cards through her fingers. She was puzzled. The names on them seemed remotely familiar. As she studied them, an unbelievable thought struck her.

She and the other girls in the office had been typing the huge card file over and over just to keep busy!

Their supervisor, who frankly admitted it, explained that they'd all have plenty of work to do eventually.

Several of the disillusioned girls quit. They couldn't stomach the waste of effort when short-handed offices nearby were working overtime.

To be sure, that's an obscure incident. It would amount to absolutely nothing if it were an isolated case. But it isn't. Federal workers the country over tell similar stories.

Waste and inefficiency are the curse of Big Government. The folks back home have heard these stories and they don't like them. Big Government has become a major political issue.

"There are too many federal employees. There can be no blinking that fact . . . The time to put the govern-

ment administrative house in order is now—before it's too late . . . Present conditions of personnel administration in many branches of the federal service are such that we can't patriotically remain silent any longer."

Those are the statements of the one group that stands to benefit most from Big Government—the National Federation of Federal Employees, the oldest and largest white-collar union of federal employees.

Luther Steward and Gertrude McNally, union president and secretary-treasurer, declare that the union position is basically selfish, as well as public spirited. They foresee the day when a wave of public resentment will arise against inept actions of federal agencies. If that day ever comes, Mr. Steward believes, the good agencies will suffer with the bad, the career people will be fired along with the fly-by-nights, and hard-won employee reform measures will be wiped out.

"It's my desire," Steward explained, "to make government agencies and employees immune to attacks by making them efficient and acceptable to the public. What I'm trying to head off is a

wide public demand to clean the 'damn rascals' out. That demand is near at hand unless we all get together and improve our Government."

Another who senses the coming storm is Representative Robert Ramspeck of Georgia, majority whip of the House and chairman of a committee investigating federal personnel.

"The public," he says, "resents idleness, wasted manpower, and mismanagement. We've got a job to do and, unless we do it better, a lot of us aren't going to be here in 1944."

That, too, is a selfish and public spirited statement.

In a recent report to Congress, the Civil Service Commission acknowledged the waste of manpower:

"Thousands of federal employees are working below their skills. This is a waste of manpower at a time when the country can ill afford to indulge in such practices."

2,000 pins in a map

LATER, in another congressional report, the Commission blamed this waste on "incompetent supervision."

Such statements have led to many popular misconceptions. People in and out of Government have no idea of Uncle Sam's varied activities in this all-out war.

Some time ago I asked a number of persons in Washington two questions:

How many Government workers are there in Washington?

What percentage of all civilian federal employees are in the Capital?

The answers to the first question averaged 800,000. Actually there are 300,000. Answers to the second question were even further off. Sixty per cent was the average. The real figure is ten per cent.

The people I questioned hadn't seen the large map at the Civil Service Commission. Each pin in the map represents a government establishment with 100 or more employees. Last summer there were 1,594 pins in more than 700 towns and cities. If the map has been kept current there are about 2,000 pins in it now.

Generally speaking, the public thinks of a federal employee as a desk bureaucrat in Washington. Somehow the postman, the bank examiner, the G-Man, and workers in Navy yards and Army arsenals aren't considered to be federal

Size Blunts Efficiency

By JERRY KLUTTZ

NOBODY knows how many people now work for the federal Government but experts agree that the work would be better done if there were fewer

workers. The public hasn't yet realized that desk bureaucrats have become a decided minority.

Government itself has done little to correct mistaken impressions. The War Department, for example, will tell you its number of civilian workers but what they do is a military secret.

Primarily, the case against Big Government is fortified with figures. But we all know that figures can lie and

government employment figures are no exception.

Civilian employment reached a peak of 917,000 in World War I. In Washington, the top was 118,000. Today the total is approximately 3,000,000 and roughly 300,000 are in Washington. Taken by themselves, these figures make a good case against Big Government. But let's look more closely.

More than 60 per cent of those num-

bers are on the War and Navy Departments' production jobs, building, servicing and repairing battleships, guns, aircraft, and other war weapons. Between them, these departments have nearly 2,000,000 civilian workers, 1,400,000 in the War Department and 600,000 in Navy.

A glance at the Army Air Forces shows quickly why it's illogical to compare our Government of World War I with Big Government of today. Then the air service was a branch of the Signal Corps, personnel relatively small. Today the Army Air Force has approximately 300,000 civilian workers and the number is growing.

Army's Services of Supply has more than 1,000,000 workers of whom barely four per cent are in Washington. These people not only make the guns; they build additions to the arsenals and run the utilities that serve them. They make uniforms, work at the ports of embarkation, service the hospitals, build and maintain fortifications.

Workmen in the Navy yards build 72 per cent of the battleships, 39 per cent of the submarines, 28 per cent of the heavy cruisers, and much other naval equipment. Navy has 23,000 white-collar workers in Washington.

Next to the War and Navy departments is the Post Office Department with 325,000 employees. Post Office hasn't increased its staff because of the war and it has fewer than 7,000 employees who are regarded as desk bureaucrats in Washington.

3,000,000 leaves some out

ON the numerical side, Washington fades into unimportance when employment figures are studied. In the 12 months after Pearl Harbor, federal employment showed a net increase of 1,204,970. In Washington, the increase was 85,000. Of these, War and Navy added 1,048,019. Office of Censorship, O.P.A., W.P.B. and the other new war agencies accounted for the remainder.

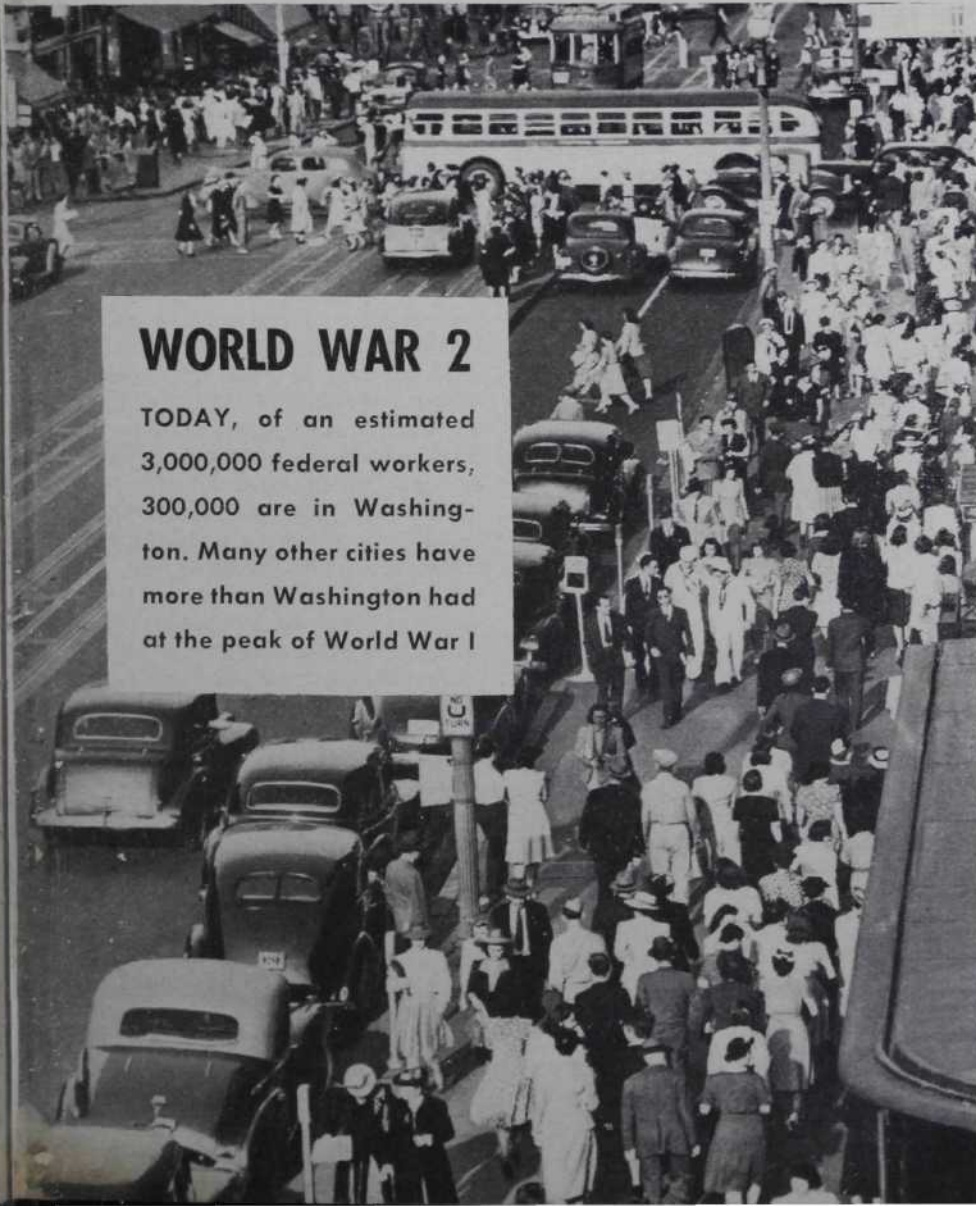
It becomes clear that, if civilian personnel is to be substantially cut, Army and Navy personnel must be reduced. Realistic people believe that is most unlikely.

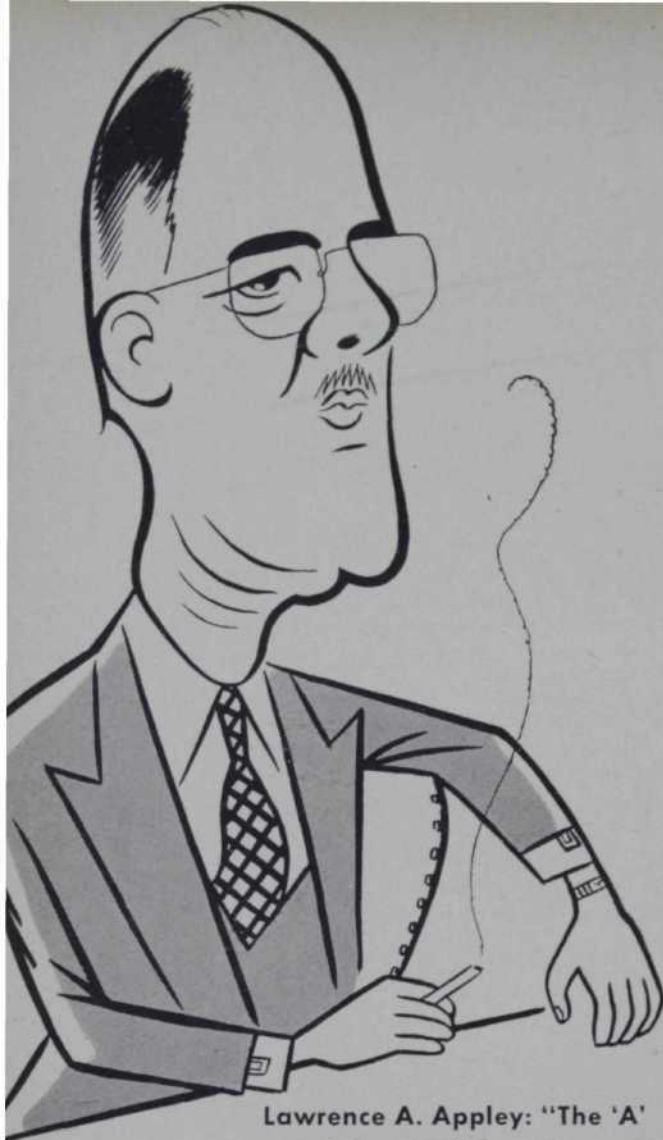
Moreover, the figure of 3,000,000 civilian employees doesn't cover tens of thousands of civilians who are working for the Government.

(Continued on page 72)

WORLD WAR 2

TODAY, of an estimated 3,000,000 federal workers, 300,000 are in Washington. Many other cities have more than Washington had at the peak of World War I





Lawrence A. Appley: "The 'A' stands for 'Ambition'."

Paul V. McNutt's First Sergeant

By LARSTON D. FARRAR

MEET Lawrence A. Appley, the man who will administer the policies and directives of the Manpower Commission

chemical company, as director of placement, which was a responsible job, but not *the* top job in the agency.

Two weeks later, he was executive director of the agency and the man to whom business, labor and the large, ever-growing W. M. C. staff look for answers to their manpower difficulties. He

knew when he took the job that the top sergeant may have to shoulder the blame if things go wrong. Paul McNutt may get credit or criticism for the policies, but Lawrence Appley is the man who carries the policies out.

Folks familiar with W. M. C. say a lot of healthy changes took place immediately after Mr. Appley took hold. People began to find out what their jobs were. Jurisdictional strife began to disappear. Businessmen who had to contact War Manpower began to hope that something would be done about their problems.

He talks your language

EVERYBODY likes Mr. Appley, which is mutual, because Mr. Appley likes nearly everybody. Moreover, he hasn't gone high-hat. He continues to answer his own telephone both in Washington and Glen Ridge, N. J. He still smiles warmly and people who ask him about particular difficulties get answers in which such expressions as "upgrading," "area shifts," and "point potentials" are strangely lacking.

This unorthodoxy is not bred of unfamiliarity with the Washington technique, because the new W. M. C. execu-

tive director has been in Washington, off and on, for four years, arriving first in 1939 when his old college-mate, Arthur Flemming, asked him to take an honorary position as consultant to the Civil Service Commission.

Mr. Appley, a tall man not unlike Sumner Welles in mien and physique, was then educational director of the Socony-Vacuum Oil Company and was coming to be looked upon as an authority on personnel relations. He travelled to Washington from New York every few weeks to lecture various government administrators on personnel problems.

When the National Defense Program was started, he moved down permanently as expert consultant on civilian personnel to the Secretary of War. Meanwhile, he left Socony-Vacuum to become vice president of the Vick Chemical Company—a position which gets little of his time today.

Hardly had he moved into his new office when the Japs bombed Pearl Harbor. He obtained a part-time leave and stuck to his Washington post.

Lawrence A. Appley was born on April 22, 1904, in the little city of Nyack, N. Y., where his father was pastor of a Methodist Church. Because the Methodist Church then believed in moving clergymen every two years, young Lawrence was never able to call any particular town "home."

The Rev. Joseph E. Appley moved successively (with his family) to Pittsburgh and Myersdale, Pa.; North Tarrytown, Yonkers, Fleischmanns, Ellenville, and Kingston, all in New York. When he retired, he and his wife settled down in Basking Ridge, N. J., where they now live. The Rev. Mr.

(Continued on page 62)

IT USED to be only a short walk and elevator ride from the street car stop nearest the Chanin Building in New York to the office of the vice president of the Vick Chemical Company, a few blocks off Broadway.

Yet, it took Lawrence A. Appley 18 years to make the trip. When in 1924 he took up fares as conductor on the old Green Line, which ran down Broadway from Fifty-ninth Street to South Ferry, Mr. Appley every day passed near where the Chanin Building now stands.

Then, as now, when people asked what his middle initial stands for, he would smile and say: "I never tell. Let's just say the 'A' stands for 'Ambition'."

Those who have followed his career from conductor, to Vick Chemical vice president, to Washington, where he is second only to Chairman Paul V. McNutt in the War Manpower Commission, are willing to let it stand that way.

For the new executive director of W. M. C. holds something of a record for rapid promotion in Government, although it took him 18 years to become vice president of Vick Chemical Company. He went to W. M. C. on December 30, 1942, on leave from the



MCMANIGAL

Calves take a large portion of all milk produced



Little girls should have one quart a day

The Milk Pail is Too Small

By R. L. VAN BOSKIRK

IT WOULD be foolish to predict how much milk or butter will be available to civilians this year.

Government officials hope for a production of 122,000,000,000 pounds of milk. They admit that this will not meet the demand. Experts believe that production will be about eight per cent less than the goal and even that figure depends on good pasturage, sufficient manpower and higher prices for producers. Civilians will get only what is left after the Government has taken all it dares without raising too much public commotion.

Milk and butter have almost unbelievable political and social implications. Some politicians want to use milk as an excuse for setting up another public utility as a further advance toward socialism, more jobs and tighter control of the voters. Social workers use milk as a symbol of the better life. Vice President Wallace, "half in fun, half in earnest," said, "The object of this war is to make sure that everybody in the world has the privilege of drinking a quart of milk a day."

Milk provides jobs for one out of 15 families including thousands of union

DAIRY products are a must item on family and army menus—but there isn't enough milk to provide plenty for all. A sufficiency of bottled milk means less butter—less cheese

teamsters who have bitterly protested attempts to consolidate milk routes in New York and Chicago. The dairy industry provides nearly one-fifth of all farm income. Milk products make up almost 400 of the 1,500 pounds of food the average American consumes. (Average consumption of canned foods is 80 pounds.)

Beverage milk, cheese, ice cream, canned milk and whole powdered milk contain more food elements than any other known substance, among them calcium and phosphorus, rare in other foods. Nutritionists say that every person should drink a pint a day, but some 50 per cent of the population drinks none.

For these reasons scarcity of dairy products has vast potentialities for creating a national furore.

Reasons for the scarcity are many and complex. They bob up in unexpected and unpredictable places. It is possible that cheese will be extremely scarce—that gallons of skim milk will be sent down the sewers in New York—that

supplies of bottled milk will remain comparatively plentiful while other dairy products become almost nonexistent (for civilians)—that farmers may switch from dairy to livestock production and thus increase the milk shortage.

Cows present the first and least complex problem. Last year, production per cow increased one-half of one per cent. That wasn't enough. December sales of fluid milk were about 19 per cent over the previous year. Total increased production was less than one per cent.

One reason for the small production increase was that not enough cows were being milked. The number of cows and heifers slaughtered under government

inspection showed a steady increase—31 per cent in November over November, 1941. Sixty per cent of all cattle killed were cows and heifers, the largest number since 1919. Local butchers and farmers killed an unknown number more. However, the slaughter figures must be examined carefully because they include beef cows and heifers which don't count in dairy production, although they are certainly important in indicating an increasing meat shortage a year or two hence. Many of the slaughtered dairy cows, according to packers and some milk distributors, were inefficient animals which will be superseded by better new stock that will come fresh this spring.

Government buys cows

BUT government officials are worried. They are buying milk cows offered at public sales with the hope that they can place them on other dairy farms. That may help, but not too much. The farmers don't need financial help to buy cows—they need manpower to take care of them.

Farm group leaders also are plugging for retention of inefficient cows. Any old cow will give almost 4,000 pounds a year. But hard-headed farmers are not responding with alacrity. It takes extra work and feed to keep inefficient cows in production and, in addition, dairy products are not bringing as much cash as meat. So when a farmer can get \$100 for an average cow, the unlucky animal is frequently headed straight for the butcher's block.

Some dairy farmers may switch entirely to livestock or grain crops—partly for profits, partly to solve their manpower problems. The proposed agricultural army to be recruited from towns and cities can help harvest the grain crops, but no farmer will let green hands handle his cows—they are too easily harmed by improper feeding and an amateur milker could dry them up for the whole season.

It is not improbable that mobile milking units will be organized before summer to help hard-pressed dairymen who will be bedeviled by the necessity for gathering feed crops and maintaining milk operations during harvest season. Concentration of cows on fewer farms is also a possibility.

The equipment situation is not much better despite the allotment of 66 per cent of 1940 production for milking machines. Such things as cans, pails, and separators are now treated like jewels, but won't last forever. Distributors are beginning to feel the strain

of worn out pasteurizing and separator equipment. A cheese factory in Tennessee that offered to convert to fluid milk was held up from September to February because it could not obtain bottling equipment.

The chief reason for a shortage is that from 15 to 20 out of every 100 cows are working for Uncle Sam. By far the greatest portion of Government's purchases goes overseas in the form of butter, cheese and powdered milk, but soldiers and sailors in this country are consuming it in carload lots. The Army wants every soldier to get at least one pint of milk a day. He gets half of it as a beverage. His standard diet also includes seven servings of ice cream per month, two ounces of butter a day and one-quarter ounce cheese. In addition, canned milk is used in coffee and cooking. Never before, in



If a cow goes thirsty she gives less milk—equipment for watering must be provided if high production is to be maintained in summer time

any army, have soldiers had milk to drink.

Providing it for them is a story in itself. Soldiers are heavily concentrated in the South where milk production scarcely meets local demands. Army officers insisted on highest type Class I milk which means that it must come from inspected herds, be pasteurized, have a low bacteria count, minimum sediment, no odor.

These sanitary restrictions are different in various milksheds. In Washington, D. C., for example, inspectors deduct two points if farmers fail to

wipe udders with individual towels, 12 points unless live steam is used for sterilizing equipment, another point if a hog or horse barn abuts the cow stable. Among other requirements demanded are plenty of light in the barn, white coats for milkers, gutters, toilet facilities for Lady Cow; clipped tails.

Omission of one or two of these requirements frequently prevents shipment from one area into another. Thus Washington won't permit sale of Indiana milk in the District because some of the restrictions are not in force out there, yet the same Indiana milk is grade A in Indianapolis. Not even Baltimore milk area producers can sell in Washington and some farmers have refused to switch to the Washington district even though prices are higher. They claim it would cost too much to live up to the Washington code.

Since few southern milksheds met all the Army's requirements, milk was despatched from New York to Florida and Illinois to Tennessee in tank cars and trucks built like huge thermos bottles. Still there wasn't enough. Enterprising Texas distributors qualified a lot of milk by designing a portable, sanitary milkshed for six cows that sold as low as \$340. But the Army finally had to accept a lower grade milk in order to get enough.

Plenty milk for army

MILKMEN are crossing their fingers over the ultimate result of that decision. Even though it is a lower grade, the milk soldiers are getting is clean, pasteurized, wholesome, contains no disease germs or onion flavor.

Eventually the public may ask, "If this milk is perfectly good, then why insist on all the fancy restrictions? Why isn't grade A milk universally the same?"

The answer, of course, is that milk is like most any other merchandise. Firm X puts up grade A, B and C plums. A has thicker syrup and bigger plums, but grade C is still a good plum. So it is with milk. There is nothing wrong with grade B or C if the public wants it, but some will always prefer grade A.

Some critics insist that, in time of shortage, we should not try to feed bottled milk to soldiers. They can get the same nutrition from whole milk products like ice cream or cheese. Milk protagonists answer that soldiers like fluid milk better and it is the most effective way to get their much needed calcium. Other critics maintain that fluid milk is all right for soldiers train-

(Continued on page 88)

On this, our 75th Birthday...

TODAY, our country is at war—engaged in a desperate struggle to determine whether the freedom we have created and cherished shall survive or perish.

Beside the all-embracing immensity of that issue, the Diamond Anniversary which Metropolitan celebrates this month is of small importance.

Yet, on our 75th birthday, it is perhaps proper that this company, representing nearly thirty million policyholders, should here voice its faith in the future, and its determination to help make that future brighter than any period in the past.

We have just reason for that faith. Ours is a business that has been built on faith—faith in the continued and growing greatness of our country, faith in the integrity of our people.

In the 75 years since Metropolitan was founded, on March 24, 1868, we have seen America face crisis after crisis—wars, panics, depressions, disasters of many kinds... and from each such crisis we have seen this country emerge stronger than ever. We confidently believe that America will do just that again—that the best years of our history lie before us.

We have every reason, too, for our determination to help make that future brighter. No busi-

ness, perhaps, touches the lives and aspirations of millions of people more closely than ours. It is our plain duty to do our utmost to help those people fulfill their dreams—of an education for their children, of security for their families, of financial independence in their own old age.

In the past, we have tried to perform that duty through the wise investment of more than six billion dollars which we hold for the benefit of our policyholders. We have tried to do it through conscientious, economical management, so that insurance costs would be held to a minimum. We have tried to do it through the prompt payment of all benefits—which, in the 75 years of our existence, have totalled over nine and a half billion dollars. And through our organized health activities, established in 1909, we have tried to make every possible contribution to healthier, longer lives for our policyholders—lives which, taken from birth, now average over twenty years longer than they did in 1868.

In doing these things, we have also tried to be a good citizen. For we are part of America. Her future is ours. And in this critical hour of her history, we say again—our faith in her future has never been stronger.

75th ANNIVERSARY—1868-1943

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Manpower—Revised Approach

By LAWRENCE SULLIVAN



RALPH PATTERSON

They estimate that six civilian workers are required for every man in military service

OUR WAR production in 1943 will be double the 1942 volume, says Donald M. Nelson. To accomplish this, we must recruit 3,000,000 additional workers in war industries, while adding 4,000,000 men to our military services and another 1,000,000 in civilian government jobs. This, in broad outline, is the problem before the War Manpower Commission, under Paul V. McNutt. In addition, Food Administrator Claude R. Wickard plans to mobilize 3,500,000 workers for seasonal employment in agriculture. By what policies and methods are these 11,500,000 units of war manpower—military and civilian—to

be recruited and trained? The answer is of vital significance to every business manager.

When a hotel advertised recently for a night auditor—needed badly in a “critical” housing area—applicants included a photographer, an embalmer, a machinist’s helper, an inventor and a furrier. Next day, the job went to a semi-skilled electrician who once had kept his own books.

Multiply this incident by about 3,000,000, and you have a life-size picture of the industrial and commercial manpower problem today. To solve it, W.M.C. will depend on voluntary co-

WASHINGTON TURNS
to local management-labor agreements in the drive to find 11,000,000 more recruits for guns and jobs

operation between government, management and labor adapted to “speak softly but carry a big stick.”

Compulsion is out!

The program decided upon will be administered through 12 regional units of the W.M.C. (the regions correspond roughly to the Federal Reserve districts), operating under a flexible outline of policy drawn by the Management-Labor Committee in Washington. In some instances, details of application will cover a single city. In other cases, the agreement will be on an industry-wide basis, as, for example, the copper-mining plan covering 12 western states. Present plans contemplate the establishment of perhaps 200 regional manpower agreements in the next three months. At present 42 are in effect—some highly satisfactory, others already up for reconsideration and amendment.

Some places have workers

FLEXIBILITY is the keynote of the new program. There are 270 major industrial communities in the war production picture. To date, labor shortages have developed in only 102. Shortages are anticipated soon in 77 more. Many important areas still have reservoirs of various skills. The program contemplates, first, the movement of surplus labor to nearby shortage areas; second, distribution of new war contracts to the surplus-labor areas.

As a collateral activity, W.M.C. will attempt to time emergency war housing developments with the movement of labor from one community to another.

As defined officially in policy directions to the regional offices, the voluntary program is based upon these four principles:

1. To protect war production from the disruption caused by employers taking



"OVER HILL, OVER DALE, WE WILL RIDE THE IRON RAIL..."

Copyright 1943, The Pullman Co.

AS THE PULLMANS GO ROLLING ALONG"

GROWING AND GOING—that's the story of our armed forces.

Growing every day. And *going* every night, for long distance troop movements are usually under cover of darkness, in Pullman sleeping cars.

It's a big job for the railroads to haul so many cars. And a big job for Pullman to provide them. But it's a welcome job to both of us, one we're proud and happy we were prepared to handle.

Prepared? Oh, yes. The way Pullman and the railroads worked together in peacetime—through the Pullman "pool" of sleeping cars—fitted right into the war-time picture.

Here's how that "pool" works:

- ▶ Railroad passenger traffic in different

parts of the country fluctuates with the season. Travel south, for instance, is heaviest in winter. And travel north increases in the summer.

- ▶ If each railroad owned and operated enough sleeping cars to handle its own *peak loads*, many of those cars would be idle most of the year.
- ▶ With the Pullman "pool," however, over one hundred different railroads *share* in the availability of a sleeping car fleet big enough to handle their *combined* requirements at any one time. As the travel load shifts north, south, east or west, these Pullman sleeping cars shift with it. They are seldom idle because when *fewer* cars are needed on one railroad, *more* are needed on another.

Now that war has come, this "pool" operation of sleeping cars enables *troop trains* to be made up on short notice—at widely scattered points—and routed over any *combination* of railroads.

That's what we meant when we said that Pullman and the railroads were *prepared* to handle the tremendous mass movement of troops that goes on *constantly*.

It takes a lot of sleeping cars to do it. Almost *drains* the Pullman "pool" at times. As a result, civilian travelers are sometimes inconvenienced.

But the war comes first with the railroads and first with Pullman—just as it comes first with you!

AN AVERAGE OF MORE THAN
25,000 TROOPS A NIGHT NOW—

GO PULLMAN

Buy War Bonds and
Stamps Regularly!

skilled workers from each other or by workers leaving one job to seek higher wages elsewhere; while at the same time providing means by which workers can change jobs if the change will help the war effort.

2. To enable each war plant to make the best use of available workers and to enable workers to use their highest skills.

3. To stop needless influxes of workers to areas where transportation, housing and health facilities are already overtaxed.

4. To provide adequate recruiting, training and upgrading programs for workers.

Considerable difficulty arises from the fact that these regional manpower agreements may not alter or amend existing laws or Labor Department regulations governing hours, working conditions, overtime; neither may they skirt rules promulgated by W.L.B., N.L.R.B., and the Walsh-Healey Division. Nor may they invade the terms of wage agreements between individual corporations and unions.

Thus, the whole structure of labor law is beyond reach of the new plan. So, too, for the moment at least, are the War Production Board's powers to redistribute material priorities, to hasten one segment of the production program by temporarily retarding another. But Director McNutt believes that intensive policy coordination in Washington may span these gaps. Congress appears disposed to give it a try.

Much confusion in manpower discussion flows from the fact that, until recently, many cooks have had a finger in the broth. About two months ago, Lend-Lease Adjudicator Harry

Hopkins published a magazine article presuming to show how many workers would be withdrawn from each civilian-supply industry in 1943. Several Congressional committees also have announced their "programs." Not infrequently, the War Production Board quietly has placed gigantic equipment orders, leaving management to recruit its labor as best it might.

Basic jobs catalogued

NOW W.M.C. has drawn an official table of 35 basic war industries; has estimated the manpower needs of each for all scheduled production; has established machinery to keep abreast of new military orders and to coordinate housing. An informal "directive" requires that henceforth manpower decisions and announcements shall be left to W.M.C., which now embraces also the whole machinery of Selective Service.

As the first step in establishing an Employment Stabilization Committee in any city or area, W.M.C. appoints an area director who then organizes a committee of recognized industrial and labor leaders. This committee draws its detailed program which is subject to W.M.C. approval.

"No worker, under such job control, may transfer from one job to another without the approval of his employer or of the United States Employment Service," says W.M.C.

But the program encourages change of jobs when:

1. A worker is equipped to perform more highly skilled tasks than called for in his present employment.

2. A skilled worker is employed at substantially less than full time in his present job.

3. The worker's skill can be as effectively used in a plant closer to his home.

4. The worker has "compelling personal reasons" for making a change.

Workers who wish to seek new employment but are unable to get a release from their present employer may appeal to the local office of the U.S.E.S. Some agreements forbid the importation of additional workers from outside areas until housing is available.

The local committees also deal directly with the Selective Service Boards, certifying essential skills and coordinating military inductions with local training programs, so that new workers are available as the old ones are called to the colors.

W.M.C. warns that military draft quotas this year will be almost equal to the combined totals for 1940, 1941 and 1942.

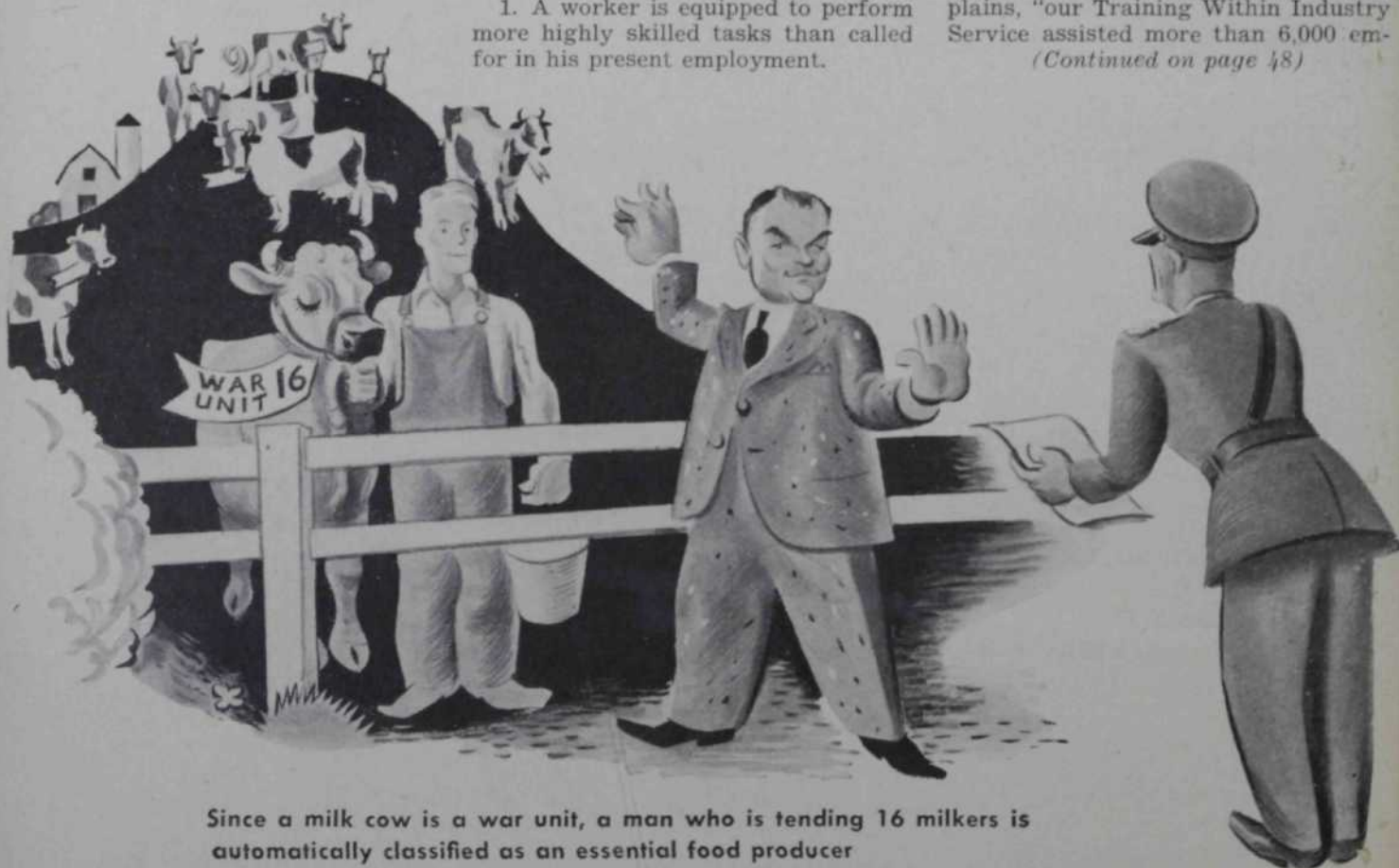
"Every employer should know how many men of draft age he employs," says Director McNutt. "Then he should explain the results of his analysis to the local Selective Service Boards."

This does not mean exemptions for all essential workers, but it often may mean deferments until new workers can be trained.

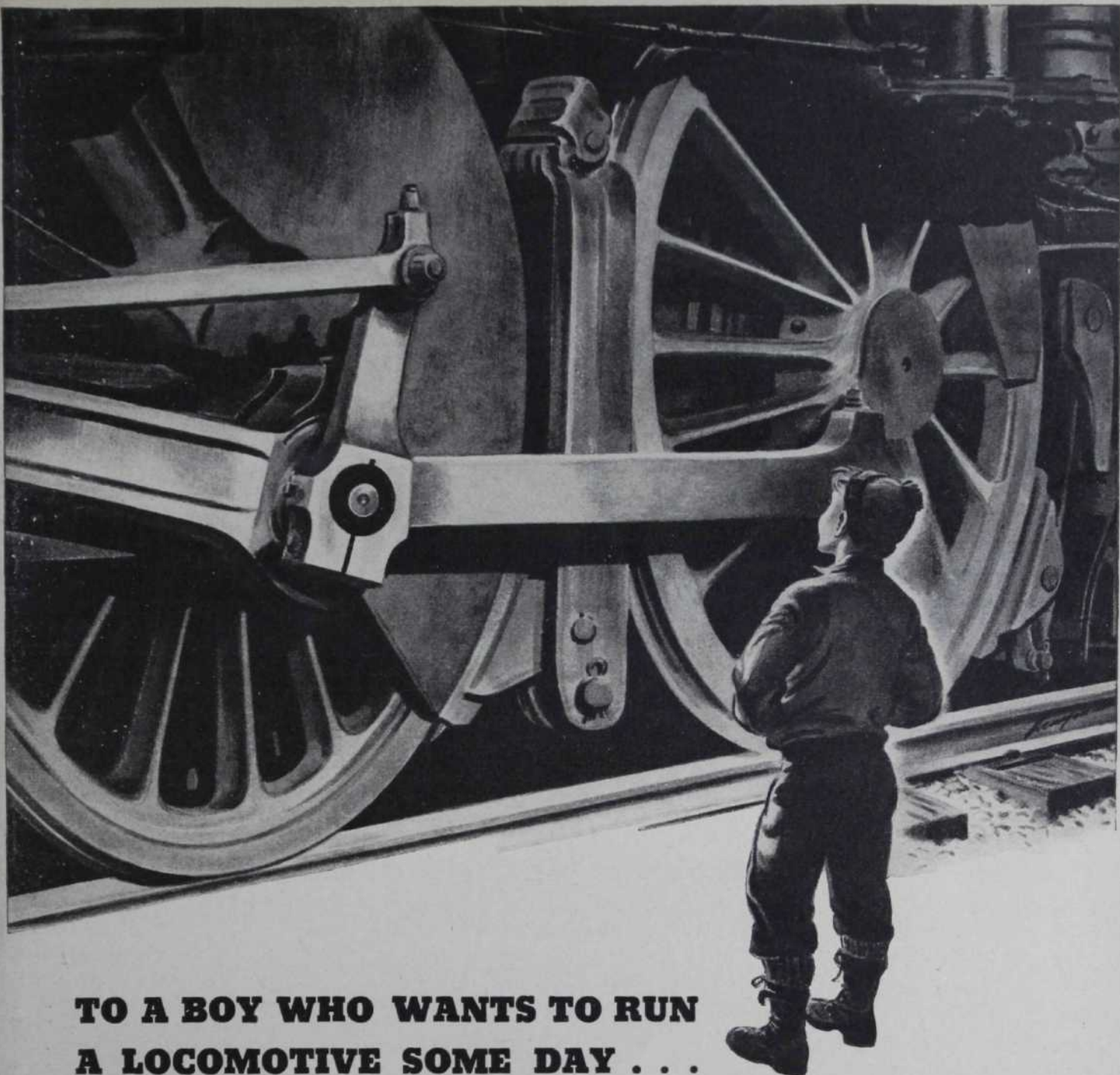
Training and up-grading of workers is a keystone of the W.M.C. program. Industrial specialists are available to set up training courses in almost any kind of plant.

"Last year," Director McNutt explains, "our Training Within Industry Service assisted more than 6,000 em-

(Continued on page 48)



Since a milk cow is a war unit, a man who is tending 16 milkers is automatically classified as an essential food producer



TO A BOY WHO WANTS TO RUN A LOCOMOTIVE SOME DAY . . .

SURE you can be an engineer when you grow up! Or a policeman or a doctor or anything else you want to be.

Because you're going to live in a *free* world, son . . . where a fellow can work at what he likes, live where he wants, go to church when and where he pleases.

Day and night, powerful locomotives on the Southern Railway are working to make this better world for you . . . hauling train after train of fighting freight and fighting men toward the battle fronts of Freedom.

And when Victory is won, these mighty "en-

gines of war" will be enlisted by the Southern to help win the Peace, too! Then they will haul textiles from the South's modern mills to clothe a war-worn nation . . . food from fertile Southland fields to feed and nourish all free men.

They will haul paper and pulp, coal and cotton, oil and ore . . . all the riches of a great *new* South that will help make this victorious nation a place where *your* boys and girls can grow up in peace and freedom.

Ernest E. Harris
President

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protection . . . and plenty of it

Now is no time to skimp on protection of any kind.

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But are you safeguarding your home as carefully as your coffee? Have you gone over it to eliminate all fire hazards? Have you taken out War Damage Insurance? Have you increased the fire insurance on both your house and household property in keeping with increased values?

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Probably never before has your insurance needed such constant supervision as today—which emphasizes the soundness of the Aetna policy in selling through local agents and

brokers. These local representatives are fully qualified to analyze your insurance needs and immediately make whatever changes are necessary. In event of loss they can give you equally prompt and valuable assistance.

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1846 Mexican War	1835—New York City	1819
1861 Civil War	1845—New York City	1837
1898 Spanish-American War	1851—San Francisco	1843
1917 World War I	1866—Portland, Me.	1857
1941 World War 2	1871—Chicago	1873
	1872—Boston	1893
	1877—St. John, N.B.	1907
	1889—Seattle; Spokane	1921
	1901—Jacksonville, Fla.	1929
	1904—Baltimore	
	1906—San Francisco	
	1908—Chelsea	
	1914—Salem	
	1941—Fall River	



The Aetna Fire Group

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Ships Snatched from the Sea

By HERBERT COREY

THIRTY smashed ships stand high in the repair docks at the Key Highway yard in Baltimore. One had been cut squarely in two by a torpedo. Another had been holed like the tin can the boy used his .22 rifle on. A two story house could have been dropped in the hole a mine had blown in another. The innards of a fourth had been tossed right up in the air and they took the bridge with them.

"The captain and two quartermasters were on that bridge."

But they were not hurt. No explanation goes with the story except that a seaman must have the luck of a cat. A fat rudder had been knocked cockeyed. Reduce a street car by one-third its length, slice the remainder down the middle and each segment is about the size of the rudder as it had been. The reconstructed rudder is now being stuffed with tallow for reasons known to the ship-repairing fraternity.

A burlesque queen walks past. She walks that way because she is a bur-

EVERY damaged ship sent back to sea is the equivalent of a new vessel added to our fleet

lesque queen at heart but she has daubs of grease on her face and she carries a welding iron. A shower of sparks falls all over the place. Fifty feet overhead a patch is being smoothed onto the rusty side of an old freighter. A collision ripped that chunk out during North Atlantic weather. A Dutch steamer is in the next stall. Something sour, sturdy and substantial about her.

"She looks like a Dutchman."

Nothing very glamorous about a ship repair yard! No bubbles of champagne in the air where somebody's wife has clunked a bottle on the bow of a new ship. No highhats, flowers, pretty legs, building-against-time records, fat gents platituding into microphones. But as important as a switch engine on a railroad.

Take a look at some facts: Since the war began, 685 merchant ships, American and Allied owned, have been sunk off the American coast, according to the *New York Times*. Good and uncontradicted authority says the Allies have been losing about 1,000,000 tons a month. Since the cargo ships average 7,000 tons that means that almost 150 ships have been sunk each month. We mourn the sinking.

We forget about the ships that were torpedoed, or shelled, or rammed, or mined and did not go down.

American yards have repaired about 15,000 ships since 1939, according to *Victory* magazine. Those ships have been of inestimable good to our side.

Some of them have been on the tinker's bench only a few days. Others have

Tales could be told of smashed ships and men who stood by

NESMITH



been in the yards for more than a year.

"The plant covers ten times as much ground as it did ten years ago."

The Key Highway plant of the Bethlehem Company is the world's largest exclusively ship repair yard (there are larger yards in which ships are built as well as repaired) and no other yard specializes in making over damaged ships as this one does. If a ship can limp in, whatever is wrong can be fixed.

The two halves of the ship that had been blown apart floated aimlessly. The crew had scrambled into the lifeboats.

"Why," they said presently, "the old bitch ain't going to quit."

They crawled into the broken ends of the two halves. Going over Niagara in a barrel has something the same element of chance. Somehow they got those halves to port.

The ship today is even better than she was before the torpedo hit her. A few extra feet in length were added to the coupling which was slipped in between the two halves. That gave her more stability, better speed and added to her carrying capacity.

This is not a seafaring story. Tales

could be told of the smashed ships and the courage of the men who stood by. There was a ship's cat that thrust a distressed head through the glaze of fuel oil on the sea and looked at the men in a life boat. They were choking with oil. Blinded with it. The ship stumbled around on the sea. The men in the lifeboat slowly unshipped their oars and began to get her head around. The ship's cat watched them incredulously. When it was finally apparent that they were about to row away she opened her mouth.

"Yaow," she cursed. "Yaow!"

"B'jee," said an engineman. "The old lady's mad."

He fell into the water while they were getting her aboard. But they got her aboard. They slapped each other and laughed. Sailors are a hardy breed. Since the ship was still afloat, they boarded her again and found she might float.

She did float. She was patched and buttressed and straightened—her whole underbody had been twisted like a tin can under a heavy foot. But today she is lumping over the sea again with whatever it is the boys want in Africa.

Every time a damaged ship is sent

back to the sea the equivalent of a new ship is added to our transport fleet. Perhaps even better than a new ship. The shipping business in war-time has unexpected angles. The battered hulks that are patched up are, for the most part, slow, clumsy ships that drag along at eight knots with 6,000 or 7,000 tons of freight. The new ships push through at 12 knots or better with 10,000 tons.

Because every pound of freight has been so badly needed, convoys have been made up of whatever ships are in hand. The speed of a convoy is rated by the slowest ships away back at the tail. The faster ships can get away if a U-boat pack attacks and take their chances without protection; or the protective craft can rate along with the faster boats and let the devil take the hindmost.

Either way a target is offered. A split convoy is an easy mark for U-boats. A slow convoy, well escorted, is twice as good as a mixed convoy.

It is no violation of the censor's rules to say that we have not had enough escort vessels. Those we have are handicapped by the necessity of guarding mixed fleets of fast and slow vessels. If we had enough escort craft to split the transport fleet into squadrons of slow and fast vessels, the escorts' task would be immensely reduced.

U-boats increase

THAT division of freight carriers is being accomplished, thanks in part to the enormous capacity of our ship-building yards—8,000,000 tons plus in the past year—and to the repair yards that have sent those hurt ships back to sea.

Perhaps these repaired ships have put us in a more favorable position than we realize.

No one knows the strength of the enemy's U-boat fleet. In a general way it is understood that the Nazis are putting overboard each month more submarines than they are losing. Possible launchings of 40 a month may be balanced against possible losses of 25 a month.

The modern submarine is a more formidable weapon than was the submarine in the First War. It is faster and stancher, can dive deeper and stand up under depth charges as its predecessors could not. It can stay at sea for cruises of six weeks or more.

Those that can find refueling spots can stay out almost indefinitely. The new submarines can carry more torpedoes than could the U-boats of the past. This is important, because, while a submarine might shoot at anything that stirs while it has plenty of torpedoes, it will not risk a shot at an

(Continued on page 46)



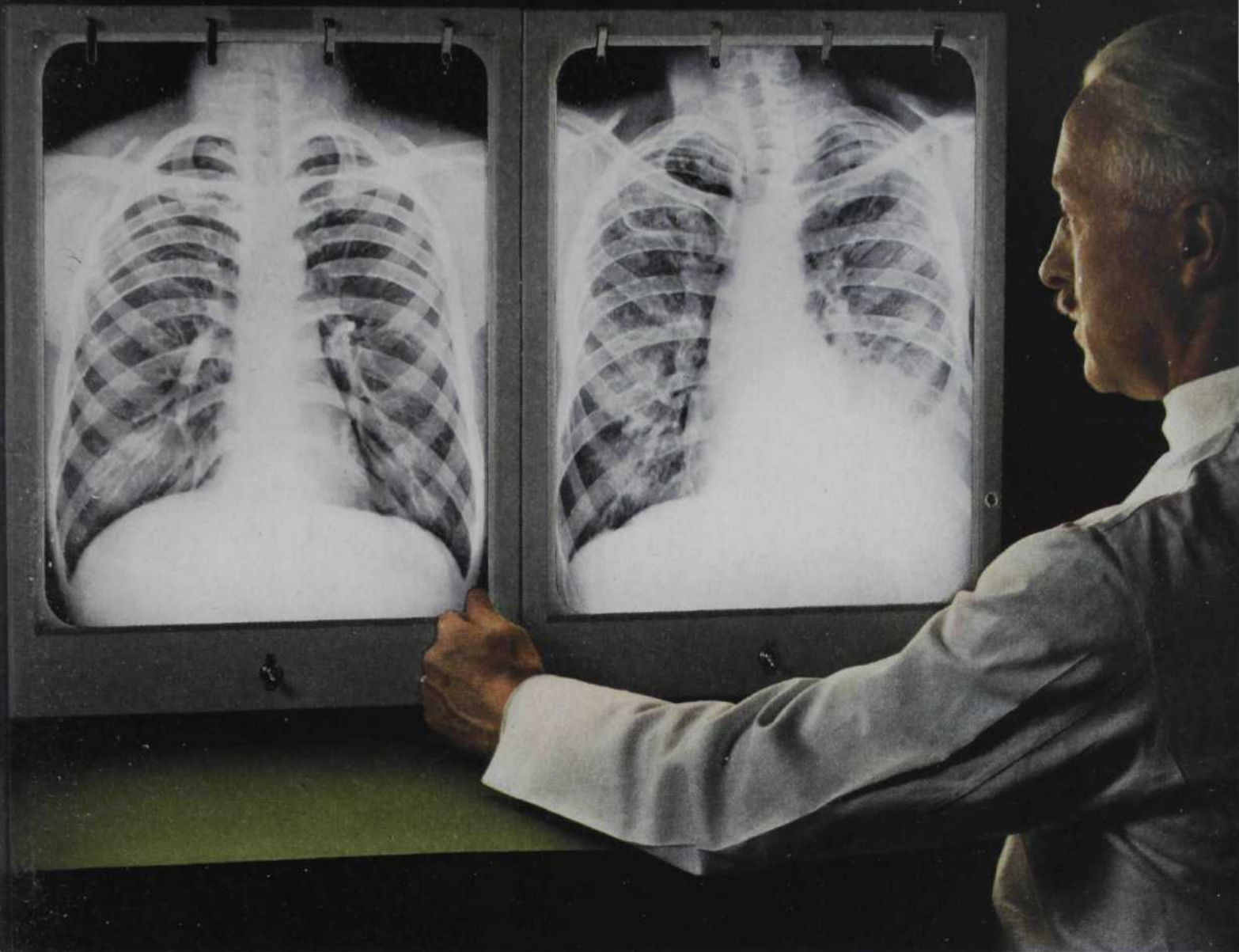
BELLRINGER



Former Gobs Make Jeeps

These three 21-year-old brothers, Leonard, Dan and Frank Syzmanski, are already retired naval heroes. They were wounded at Pearl Harbor and in a later Pacific engagement, hospitalized and honorably discharged. They didn't let any grass grow under their feet before they got back into the battle. Today they are making jeeps in the Willys-Overland plant in Toledo for use against their "personal" enemies.





INSIDE VIEW OF A HEALTHY SOLDIER . . . This X-ray picture in minute detail shows Army physicians that his lungs are sound—free from tuberculous infection. It was made on Kodak X-ray Film in "the greatest tuberculosis hunt of all time."

REJECTED . . . serious tuberculous infection. Not only is a man unfit to fight kept out of the Army—for the first time, perhaps, he learns of his condition, and begins his own campaign against another enemy which can be conquered.

Kodak X-ray Film helps guard our armed forces against Tuberculosis

EVEN WAR has its bright and hopeful side—even this war of frightfulness. It is bringing the surest, most conclusive test for tuberculosis to millions of young Americans. As a matter of standard practice, those volunteering or called under Selective Service are radiographed—pictures of their lungs are made on X-ray film.

This alertness and determination on the part of Army physicians to keep the Army free from tuberculosis are

also performing an invaluable service for those found to be infected. For tuberculosis, with timely measures, can be cured. But frequently it does not give a warning of its presence, without a radiograph.

THIS is the greatest X-ray job since Kodak introduced flexible X-ray film, to replace cumbersome plates, in 1914.

It prophesies the not-too-distant time when X-ray will make possible the examination of all our people—as hundreds of thousands of industrial employees have been examined, as a matter of routine, for years.

A good deal has been accomplished. X-ray pictures have already been a major factor in beating tuberculosis down from first place to seventh, as a hazard of life . . . Eastman Kodak Company, Rochester, N. Y.

Serving human progress through Photography



This "Carrot" means healthy metals

YOU CAN SEE why metalworkers call this lump of calcium metal a "carrot." This is the way it looks when it comes from an electrolytic cell in which it is made.

Calcium is a soft, silvery-looking metal. Although it is abundantly present in such common materials as chalk and limestone, its recovery as a pure metal is extremely difficult. Yet it is vitally essential to this country.

In the making of stainless or high-alloy steels, calcium drives out impurities, giving cleaner, better steel for casting or rolling. In magnesium casting, small amounts of calcium improve the finish of the surface and minimize scaling. Calcium is an essential in the making of many metals.

This hitherto rare metal has been made in this country only during the past few years. Before Europe exploded, the United States was dependent upon France as a source of supply.

But back as far as 1935, thinking that this country should have a domestic source, ELECTRO METALLURGICAL COMPANY, a unit of UCC, started a major research program. After four years of work . . . as French supplies dwindled . . . a plant was put into operation for the manufacture of the gray metal. Today, ELECTRO METALLURGICAL COMPANY produces many times as much calcium metal as this country ever imported . . . and production is increasing.

UNION CARBIDE AND CARBON CORPORATION



30 East 42nd Street

New York, N. Y.

Principal Products

ALLOYS AND METALS
ELECTRODES, CARBONS AND BATTERIES
INDUSTRIAL GASES AND CARBIDE
CHEMICALS PLASTICS



IN THE AIR SOONER! Vital aircraft parts flow from production lines quicker because the use of calcium metal results in better metal.



BETTER HEALTH! Pure calcium metal is used as a drying and purifying agent in the manufacture of certain new disease-fighting drugs.



CHEMICAL HELPER! Calcium is necessary in making a number of rare metals—many of which heretofore were unavailable commercially—and all of which are vital.



METAL-SAVER! In the melting of copper scrap for use in certain types of electrical equipment, calcium is used as a purifier and a restorer of electrical conductivity.

Capital Scenes... and



What's Behind Them

Old man Demos Redivivus

SO much has been going on lately that the biggest thing of all has been more or less overlooked. The Russians have booted the Nazis around, the Japs have done some praiseworthy dying in the Pacific, various haters have begged Americans to grit their teeth when they think of the enemies, two Flynns have fallen off the first pages, we have steamed up over ward politics in North Africa, manpower has been frozen to war jobs, our meat ration has been cut to the British pattern. A feast every day for the news-hungry.

Congress has been moving to recapture the power and dignity ordained by the Constitution and we have hardly noticed it.

Leaders on both sides of the party line are agreed that nothing shall be done which might impede the war effort. The executive departments will not be hampered in any way. But an effort will be made to bring to order the bureaucrats who are exercising authority to which they are not warranted. A Congressman of the moral and intellectual stature of Hatton Sumners of Texas has said as much.

Not a partisan move

PERHAPS a political bug may be found under the chip later, but men who make it a business to watch Congress think that real sincerity is being demonstrated. Members on the majority side have been more outspoken than their opponents in criticising bureaucracy and mismanagement. No attempt has been made to defend Congress for its failures in the past. There is a disposition to let bygones be bygones. Not a single member on either side has risen to defend the faults of the bureaucrats. That is immensely significant to the congressional experts. All agree that the road back will be long and muddy and full of stumps.

Congress takes the rap

LANHAM (D) of Texas reintroduced a bill to establish an office of fiscal investigations as an agency of the House:

That would enable us to know in detail just how the funds we appropriate are used and spent.

The bureaus are massed against that bill, and let no one think that a mass of bureaus is not a formidable body. They can pull job-and-money wires in every

district. In perhaps nine cases out of ten a bureau spends the money it gets just as it pleases. Member Lanham thinks that millions of dollars can be saved if the bureaus are required to justify their spendings.

There are 3,000,000 people on the federal pay roll, outside of the armed forces, and 531 members of the two Houses of Congress. Yet the situation is that the rules and regulations of the agencies are often so foreign to the legislative intent that the people ascribe to Congress responsibility for things for which we were in no way responsible.

That was not a veiled defense of Congress, because he admitted that much of what is wrong can be put right.

A sample of sloppiness

THE Post Office Department is the largest business organization in the world today. Postmaster General Walker has asked for means enabling him to find out what it costs to carry the mail. No P.M.G. has ever known. He thinks it will cost the Department \$71,000,000 to handle the penalty mail, which is the forthputtings of the various bureaus. He has no way of checking it. If a ready writer in the Department of Agriculture writes himself a piece about bug love—it has been done—his chief can have as many copies printed and mailed as he pleases. Another estimate of the penalty cost is \$90,000,000. The cost to the Department of handling Congressional franked mail in 1942 was only \$767,028. Approximately one-tenth of the bureaus' mail free.



Postage might be cheap again

IF the bureaus paid for that penalty mail, the P.O. Department would be so magnificently solvent that it could return to the old one cent stamp for a local letter and a two cent stamp for a letter anywhere in the United States.

"The bureaus would not permit it."

It's worth thinking about, though, when you cannot sleep at night. If the bureaus had to ask Congress for stamp money they would be forced to cut down their output, because Congress would not give. That would relieve the paper shortage. There are members of Congress who think that some of the bureaucrats are deliberately trying to force newspapers and magazines to such a reduction in size that they could not take enough advertising to pay their costs. Bradley of Michigan is one.

"The newspapers would have to ask

subsidies from the Government. That would mean they would be completely subservient."

"An off-the-record Czar"

PULPWOOD men say they cannot do business at the prices set by the O. P. A. So far as known these were not set by men who know the industry. Shafer of Michigan said these prices:

"Are a product of the peculiar mental gymnastics of the dreamers in O.P.A."

So the tale of Harry Eckstein came to light. As the O.P.A.'s soft wood executive he called a meeting in Boston of New England lumbermen. The reporters of the technical press were present:

"But I won't let you print anything," said Mr. Eckstein.

If a reporter had reported to Keeler of the *Tribune* or Speed of the *Sun* or 50 other old-style managing editors that Mr. Eckstein had told him he could not print, the flames would still be flickering where the bombs were dropped.

Nothing may come of it

PERHAPS Congress may soften when its members begin to tire in the 78th session. Up to this moment it seems to be getting harder. Louis Ludlow, Democrat and philosopher of Indiana, is highly regarded by his fellow members for his vigor and sincerity. He is something of a crusader, too, and it took all the Administration's power to head off his resolution of four years ago providing for a popular referendum before we could go to war. He thinks Congress should curb bureaucracy:

"It has become such a dominant force that it threatens to stifle free enterprise."

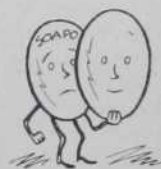
Ludlow said the present system of governing by executive order—"many of these orders are framed in the bureaus"—could easily transfer our government into a great Washington superbureaucracy. He thinks the people are looking to Congress to bring the operations of government within the Constitution.

So Celler told a story

REPRESENTATIVE Celler of New York is a Democrat of the purest New Deal quill, but he ran into bureaucracy the other day and told the House about it. It is no secret that a plan is on foot to force manufacturers to abandon the brand names to which they have given value by years of efficient service. One of Mr. Celler's constituents was the lowest bidder on a soap contract for Puerto Rico:

"We will buy your soap," said the Agricultural Marketing Administration, as reported by Mr. Celler, "provided you will take off your brand name."

The soap maker refused. Mr. Celler argued with the A.M.A. He got nowhere. "I thought that was outrageous."



Straws in the wind

THESE incidents and comments may seem trivial in view of the immense adventure on which the world is launched. Millions of men are dying. By the end of

1943 the national debt will have reached to approximately \$900 per American. That takes in every one, from the babies just old enough to burp to the grandfathers who fought at Bull Run. Or ran away from that little river. By the end of 1943 the family of five will be in debt to the sum of \$4,500, more or less. Write your own ticket on that family's share of the national debt if the war runs into 1945, which is the current guess in the Army and Navy. That really makes no difference. Hitler has us in a clinch and we must fight our way free. But the incidents and comments hereinbefore referred to are not trivial at all.

The state of the nation

THE men best qualified to assess the congressional attitude—in the view of this reporter—insist that it has undergone a fundamental change.

The result of the 1942 election was distressing enough to the New Dealers who abruptly became lame ducks quacking for jobs. Since then the other side of the House has realized

that a time bomb was dropped on it in November which may detonate at any moment. Letters have been making this plain:

"We are not satisfied with what has been going on. You are the only ones we can get at just now. You'd better make good."

Both sides of both Houses are getting those letters, mind you. Therefore, Allen Treadway's story of the nosey woman who shouldered her way into residences in his district to list the brass andirons and ancestral candlesticks has immense significance. That kind of bullying stirred up the people.

The sanctification of Leon

THESE men, and they are Democrats as well as Republicans, think that Leon Henderson rendered a service of inestimable value as head of the O.P.A.

"Our people are kind and generous and patriotic. As a nation we would not count the cost. But we are also individually shrewd. We resent circus ballyhoo and extravagance."

Mr. Henderson's unquestioned sincerity eventually ceased to be a defense against the charges of administrative incompetence. His noisy arrogance centered attention on the fact that many things were going wrong. Member Shafer reported that Battle Creek shivered in the middle of a cold Michigan winter because government agencies could not agree. A bevy of boy barristers wrote 20,000 words of instructions to butchers. The butcher brought in to tell them what they were trying to do gave it up and went home.

Therefore, say these men, Leon did a grand job. He centered attention on what has been going wrong. A suave administrator might have done the same thing to us and we would not have waked up.

Congress may go to town

The people were a little tardy in getting their eyes open, these men say. They ad-

mit that is no excuse against the charges now being formulated.

"But the people hired Congress to watch and check," these men say. "And we did not. Looks like a Great Day in the Morning is coming, and it will dawn on Republicans as well as Democrats."

The voters want to know, for example, what possible excuse the War Department can have for buying as much land as is included in the boundaries of the five New England states and the District of Columbia. BUYING it, mind you. What in the name of Mark Twain's frog can the Army do with so much land? The letter writers indicate that Congress cannot excuse itself by blaming the sudden combination of the naive military mind with unlimited money. Of course an explosion might have been anticipated. Congress should have been on hand with a wet mop. But Congress was making passionate oratory instead of being on its job.

Rubber raft for wrecked hotels

MOSTLY we learn our lessons the hard way. Practically everyone of us has a little block of stock in the Glittering Gulch or a scar where the corner lot in Mangrove Manor was taken for taxes. We've been fooled and the day will certainly come when we will be fooled again, but in between spells we can see pretty clearly:

"The Army," the letter writers report literally by the thousands, "certainly saved a lot of stockholders in busted hotels."

They send in financial statements to back up their contentions. They want to know why the Army could not commandeer hotels when needed, as other nations do. They ask if any one has ever heard of Britain or Germany or Italy buying hotels in which to lodge their soldiers. They answer their own questions. Member Jennings of West Virginia is hot as a welding iron over the Army's seizure—outright, with eviction overtones—of thousands of acres of lands on which families had lived for generations. It is no explanation to say the Army needs it. Maybe the Army only thought it needed it. In that case an irreparable harm has been done.

The pattern has changed

NO one on The Hill has said that Congress has suddenly grown high-minded. It might be, of course, that high-mindedness is merely an acute perception of the best place to get off. A congressman will, for the most part, do what he thinks his constituents want him to do in order to make sure of re-election;

"Hell, son," said one of the best on The Hill, and whose identity shall always be a secret, "we all do. Only thing is, a smart congressman ketches the new wagon before his constituents know it is there."

All congressmen, on both sides of the line, were forgiving everything and doing everything required by the war effort. But they forgot—say the men who are the authorities for these statements—that it is not aiding the war effort to burn up money on the street corners. The folks

back home, too, are likely to remember that hundreds of thousands of acres of the land the Army bought were once good taxpayers. Not any more.

Other dry bones rattling

IT may be that these unhappy prophets will not see their lamentations translated into action soon. But they think they can see signs that a sober-eyed and statistical stock-taking is not far away.

"Right now, son," said the southern congressman of the preceding paragraph, "it looks like we fell down on the job."

It is a fact, though, that signs indicate that the executive departments are also beginning to fidget a bit.

Five years' war ended

THE significance of the fact that the Treasury Department's accounts are all being audited by the General Accounting Office did not reach the daily press. But it's like a thick breastbone in a gander. It promises cold weather. The G.A.O. has always been supported by Congress. It was created by Congress to keep an eye on the departments and bureaus. It was given the authority needed. But some of the independent offices have refused to submit to the G.A.O. auditing.

"Our business is none of your business."

The G.A.O. lacked the authority to go in with a constable and a stick and seize the books. The G.A.O. does not work that way, anyhow. When in 1937 Treasurer Morgenthau refused to permit the G.A.O. to audit the accounts of the R.F.C. and other agencies that kept their billions in his vaults the G.A.O. merely refused to "clear" the Treasurer's accounts. So in the five years succeeding. But before Treasurer Morgenthau can get a clearance and step out of the Treasurer's office, free, out of debt, safe, solvent, he must get the G.A.O.'s initials on all his accounts. So the G.A.O. has won the six-year-long fight.

Here's where demos came in

BUT that fight would not have been won—these men say—if the silly talk heard not so long ago that Congress is done for had not been completely disposed of. Old Man Demos, these men say, is coming back strong. For sustaining evidence watch the next two years. There will not be any political split, these men say. The actions of the executive will be upheld. No effort will be made to name a joint committee to show the Army and Navy how to run the war. All the money needed will be given. But there will be a running check on current operations and a calm inquiry into what has been done in the past. To shorten up the story, these men honestly believe that, after eight years behind the eight ball, Congress is coming out of the eclipse.

Herbert Corey



HOW TO BEAT THE RISING SUN



WHEN THE TROPICAL SUN is afire—blazing fiercely—our fighting men come to grips with still *another* enemy.

An enemy that moves swiftly, silently. An enemy with terrific striking-power... *heat cramps!*

But in this new war...our soldiers are armed to crush every enemy. To combat heat cramps, they carry a weapon far tinier than the stones of that earlier warrior, David. Tiny tablets of *salt!*

For to annihilate heat cramps...you must replace the *salt* lost by the human body in excessive perspiration.

Men toiling in the intense heat of our arsenals, here at home, also know the terror of heat cramps. But

they know, too, their vulnerability to *salt* as more and more progressive plant managers turn to Sterling Salt Tablets to protect their personnel.

International Salt Company will be glad to help you eliminate this industrial hazard... cut the loss in vital man-hours due to heat cramps.

Further, its representatives are well qualified to tell you how salt or salt processes by International can help to improve production in glass-making, tanning and dyeing, in meat-packing and canning... and scores of other industries. International Salt Co., Inc., Scranton, Pa. Rock salt, evaporated salt, lixate brine, salt tablets, Sterling table salt—for industry, agriculture, the home.

Peace Problems in the Test Tube

★ ★ ★

BALANCE SHEET OF POST-WAR CONDITIONS

ASSETS

1. Reduction of Private Debt
 - a. Farm
 - b. Mortgage
 - c. Instalment sales
 - d. Insurance loans
 - e. Open book accounts
 - f. Etc.
2. Reduction of State and Local Debt
3. Accumulated Private Purchasing Power
 - a. Savings banks
 - b. Insurance policies
 - c. Government bonds
 - d. Home ownership
4. Requirements for Foreign Rehabilitation*
 - a. Food and clothing
 - b. Animal feeds
 - c. Breeding stock
 - d. Machinery and equipment
5. Unemployment Compensation Benefit Rights
6. Deferred Demand*
 - a. Decrease in inventories—retail, wholesale, manufacturer and consumer
 - b. Consumer semi-durables—example: clothing
 - c. Consumer durables—example: housing and motor cars
 - d. Deferred maintenance of consumer and producer properties
 - e. Family formation
7. Technical Shifts Requiring New Capital;
 - example—development of plastics and light metals*
8. Prospect of Avoiding Extreme Inflation
9. Growing Public Awareness of the "Role" of Business and Industry in the Economy
10. Trained Labor Supply and Know-How
11. Public Works to Take Up Slack

LIABILITIES

1. Delay of Reconversion to Civilian Production
 - a. Disposition of Government contracts and supplies
 - b. Conversion a time-consuming process
 - c. Scarcity of raw materials
 - d. Equipment
 - e. Wait-and-see attitude due to new materials
2. Taxes and National Debt
 - a. Effect on working capital of business
 - b. Costly task of reconversion
 - c. Taxes and cost-price relationship
3. International Trade Uncertainties
4. Problem of Sustaining Investment in a High-Income Economy
5. Absorption of Total Labor Supply into Production
 - a. Expanded labor supply*
 - b. Expectations raised by war-time wages
 - c. Plant and industry-wide collective bargaining assumes no responsibility for absorption of total labor supply
 - d. Effect of high wages on mechanization*
 - e. Pay roll taxes on employer a tax on demand for labor
 - f. Annual increase in labor supply about 700,000 workers
 - g. Necessary investment per job
 - h. Cost-price relationship
6. Maladjustments in Price Structure
 - a. Wages
 - b. Farm prices
 - c. Other raw material prices
7. Government by Blocs and Pressure Groups
8. Lack of Unity as to Future Political and Economic Structure

*Some "Assets" are in fact liabilities in terms of potential production; likewise, some "Liabilities" are advantages. Here, however, we are concerned with solving a specific problem—re-employment and getting civilian production under way after the war.

★ ★ ★

WHEN JOSEPH, son of Israel, was No. 1 planner in Egypt, the word "plenty" was used to designate materials—food, clothing, necessities. Because Joseph's plan of levelling out the availability of materials succeeded, he became a national hero.

Today, when the words "plenty" and "famine" are used, they refer to jobs as well as materials. Thoughtful persons are giving consideration to problems of manpower use in peace as well as war.

It's obvious that we have too few men for the jobs available now. Just as obvious is the fact that the day after peace is declared we might have too many men!

For good reasons, not the least of which is the belief that the right to work is every man's heritage, the Chamber of Commerce of the United States has set up a Committee on Economic Policy, whose principal task is to encourage national, regional and local consideration of plans to put men to work at useful tasks when war's assembly lines are dismantled.

Progress is good

THIS Committee, which has access to all facilities of the National Chamber's varied departments, is analysing and reporting now upon the economic policies under which post-war progress can be made. The keystone of its thinking is in regard to jobs for men, who must be put to work and kept working in our economy, if we expect our system to remain familiar.

Briefly stated, the Committee's aims are:

One: To identify, analyse, report and obtain action upon economic problems, national and international in their post-war effect, so that all may study these plans in their proper perspective.

Two: To encourage the analysis of local problems and conditions by local organizations and businessmen and to develop means of accomplishing desirable objectives, at the same time encouraging all groups to become familiar with the higher, more far-reaching, objectives for the nation and the world.

The Committee, whose economist and secretary is Emerson P. Schmidt, in effect, is drawing up a balance sheet of our national assets and liabilities. It will study recommendations for augmenting the assets and decreasing the obstacles to steady post-war prosperity.



WE HAVE THIS TO SAY ABOUT

WOOD

What's being done with wood today would make Chippendale turn over in his grave.

The oldest construction material is stepping out in the younger, faster company of the metals. We urge you to watch its strides. It is going places.

Perhaps the new capabilities which have been given to this familiar friend will help you to meet the challenge of providing your share of the 55 million jobs that are going to be needed when this war is over.

Here at Alcoa we are convinced that the more of the new materials you look at, hard, the more your imagination will be stimulated for the future.

We mean that. Imagineering is the only product we have to sell you, and Imagineering plays no favorites.

We would rather have you let your imagination soar,

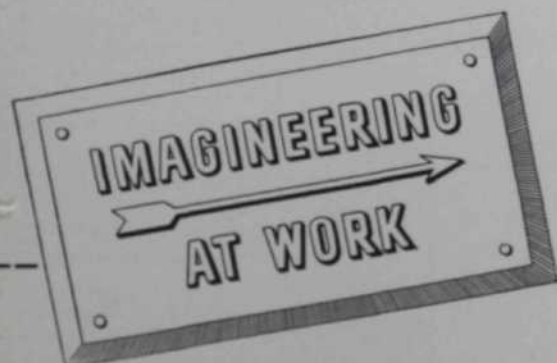
and come down with wood for the answer, than have you do no Imagineering at all.

Of course we would much rather have you come down with Alcoa Aluminum for the answer, and the chances are that you will in more cases, and in more directions, than you have dreamed of, if you haven't taken a good square look at the economics of Alcoa Aluminum, *as of today.*

Even if you are fabricating some form of Alcoa Aluminum on war work (*and who isn't these days?*) you can't know the half of all the cost story and fabrication story that makes Alcoa Aluminum the newest material there is.

There is a realm for Imagineers.

ALUMINUM COMPANY OF AMERICA, 2125 Gulf Building, Pittsburgh, Pennsylvania.



Alcoa Aluminum

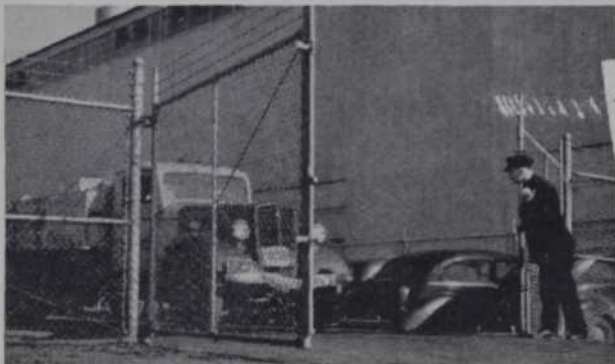


How Industry is fighting the Spy Menace



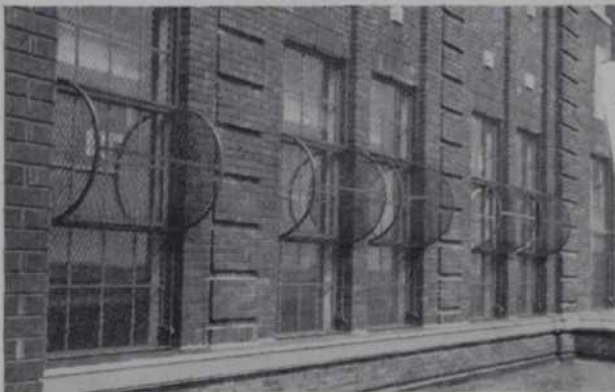
-with sturdy fence

Long before Pearl Harbor, thousands of plants had taken this precaution. Good fence is a strong outer defense against would-be intruders. It would frustrate their plans before they ever gained access to the plant.



-with guarded gates

The only safe way to handle plant traffic is to make everyone show credentials to guards. With guards at all gates you can keep a close check on all persons or materials entering or leaving the plant.



-with window guards

If anyone inside the plant has the idea of tossing tools or plans to a confederate outside — these window guards will stop him. And, of course, they prevent spies from using windows to break into the plant.

HOW complete is your plant protection? Is entrance blocked by strong, high fence? Are vulnerable spots in the plant enclosed? Are windows guarded with a strong, close mesh? If you need the materials for this protection, call on us. Demands are heavy and supplies are limited. But, if you

are making war goods and have proper priorities we can provide the fence you need. We'll help you plan your fencing and give you a free estimate.

CYCLONE FENCE DIVISION
(AMERICAN STEEL & WIRE COMPANY)
Waukegan, Ill. • Branches in Principal Cities
United States Steel Export Company, New York

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It is issuing from time to time supplementary data and viewpoints for all who see the need for thinking now of problems that seem inevitable after victory.

In correlation with the Committee on Economic Policy, the Chamber's Commercial Organization Department is stimulating the formation of corresponding committees in every local Chamber—or related organization—in the nation.

The Chamber, through its departments, also is engaged in a wide array of post-war readjustment programs. The Social Security Committee is developing a social security program for the United States. The Field Department has made a survey of estimated consumer demand in the immediate post-war period and will repeat this survey from time to time to keep the data current. This department also is analysing the extent of the reconversion problem to face American business when "P Day" comes. The Department of Construction and Civic Development is collaborating with government groups in developing a post-war construction program, and is making an intensive study of urban problems. The Committee on Foreign Commerce is studying ways to promote foreign trade in the post-war period and is devoting considerable attention to the problems of reciprocal trade agreements, lend-lease and tariffs.

For soldiers' benefit

"THE present is none too soon to be thinking of post-war problems in every factory, every city and town—and even in every home," Mr. Schmidt pointed out recently. "People have a habit of taking their time about thinking of the future, but wars have a habit of ending unexpectedly. Planning now should not interfere with effective prosecution of the war on the production and home-front . . . and it can easily make possible greater and more permanent gains after the war for the men who have gone to fight."

Although all should study national plans, it is more immediately practical for every town to think now of its post-war potentials. In some towns, whose industries may include clothing factories, meat packers, or food processing establishments, reconversion will be a minor problem. In other towns, where powder factories and similar establishments are going strong today, the impact of peace may be demoralizing, unless plans are made now.

Mr. Schmidt emphasizes that more than planning is needed. It is not only good sense, but good business, for communities to draw up now the needed public projects that must be undertaken, the number of men who will be employed, the amount of money likely to be required, and contracts for the work—to be done after the war, of course. If all the towns and cities would begin to act today, many unemployment difficulties and potential headaches will be eliminated tomorrow.

There are plenty of jobs today. But can we take a cue from Joseph and spread the work for another seven years? Or 70?

They bet their lives



THERE is a big, open, well-lighted factory spreading its acres out on the flatlands of a Middle Western state.

There's a long assembly line where Buick-built Pratt & Whitney engines grow, test cells where they get an hours-long going-over under power, another line where they are torn down, inspected, put back together—and back of all, huge factories in Flint where countless parts take shape.

And there's a sobering thought that rides with every part through every process, with every engine down the line, with every packing case that carries a finished engine off for installation in a plane.

That thought is this: Some day somewhere an American flying crew will bank their very lives on the way we build that engine.

They will stake everything on it, and on the perfect functioning of every one of its thousands of parts.

They'll trust it to carry them

through overcast and ack-ack fire, to hold them steady through the bombing run, to help them wheel and dodge in combat with enemy fighters—to carry them home again, safe and sound and able for more.

Maybe your boy will be in that crew. Maybe ours will. Maybe someone who once proudly called himself a Buick man—there are more than 3,000 such now wearing the uniform.

Good people, do you think Buick is insensitive to that?

Do you think anybody with as many good and loyal and trusting friends as we gratefully can claim can do anything but his unstinted best under such circumstances?

You bet your very life we can't!

And because we can't, flying men can bet their lives on our work.



BETTER BUY BONDS

*Let your dollars
lend a hand*

war goods
**WHEN BETTER AUTOMOBILES ARE BUILT
BUICK WILL BUILD THEM**

BUICK DIVISION OF **GENERAL MOTORS**

Ships Snatched from the Sea

(Continued from page 36)

empty hull toward the end of a voyage.

In 1942 American yards built about 800 ships. In the same time 6,000 were repaired. The Maritime Commission is training young men for sea duty—15,000 last year. It can handle 50,000 this year, if needed and available. For all that, every man in authority has stated that—to quote A. V. Alexander, Britain's First Lord of the Admiralty:

"Nineteen hundred and forty-three will be a crucial year at sea."

Sometimes the ship repair men do things that remind one of a village tinker, stepped up in power by a million. The front fifth of the hull of the 24-year-old destroyer *Blakeley* was stripped off by a torpedo. She should have sunk, but she didn't.

"The bow, anchors, bow gun and everything forward of the bridge were blown to bits."

A seaman on the job slammed home a bulkhead door. She staggered into a small British port in the Caribbean and some of her men went ashore to borrow planks and timbers. With a wooden front end—it wasn't a bow—spliced on, the *Blakeley* wobbled to the nearest U. S. repair station. There a false bow of steel was rivetted on, anchors were made of a truck axle and a piece of railroad track. She staggered on home. In the repair docks a sister ship, the old *Taylor*,

was steeping in red lead preservative. The ragged front end of the *Blakeley* was trimmed into shape, the front end of the *Taylor* was fitted on. Welders finished the job. The *Blakeley* is back in the war better than ever.

"Better than ever?"

"Listen. Faster and stauncher than she ever was. You might call her a new ship."

The incredible thing about the miracles that are being wrought is that so much is being done with what might be called amateur labor. The 2,000,000 men and women working in subsidiary factories and in shipyards for the most part knew little about ships before they got their first jobs. Yet, according to a statement by an authority:

"Ship repair is one of the most exacting tasks required of man. Workers not only must be experts in their respective fields, they must also be familiar with any type of vessel that comes in. Repair crews must cope with a variety of propulsion equipment. The ship may be either a coal or an oil burner. If steam driven, she may have any of a half dozen types of engines; or her power plant may be Diesel or turbo-electric. No two cases of ship damage are exactly alike.

"The ship may have struck a mine. All that can be seen is a hole in the hull. But plates and rivets weakened by the explosion cannot be discovered without a

searching examination. To the eye and even to the ear the engines may seem as right as rain, but only by taking them down and examining every part can one be sure."

Yet these things are being done by American workmen who were not shipbuilders by trade two years ago. The assembly line principle operates for some. Each man does the same thing over and over until he knows it well. Others tackle a new problem every time they lift their eyes.

Women have proved to be as good as the men where heavy lifting is not required. At the Key Highway yards a pretty little redhead was crawling over the floor drawing a template. Pronounced "tem-plitt."

"Is she good?"

"Sure she's good."

Plans while you wait

A TEMPLATE is the pattern of the rounded parts of a ship. That may be a landfaring description but it is accurate. An immensely intricate design of curved lines is drawn on a freshly shaved floor and copied on tracing paper. Then the tracings are transferred to thin strips of wood which are attached to the plates to be moulded and then burned off. The plates are then slipped into place on the ship structure and welded or rivetted to their neighbors. The operation as described seems simple enough on a ship that is being built from scratch. All the beautiful drawings are placed in the hands of the artisans, all done to scale, all conforming to the master plan.

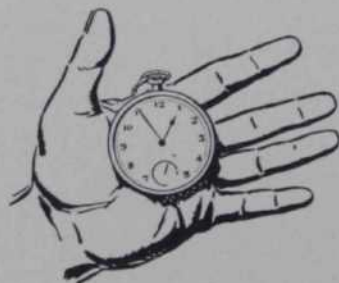
It is not that easy in a repair yard.

Often there are no original plans to work from when the smashed ship comes in. They are on file somewhere, no doubt, but the ship may have been built 25 years ago in a yard that is now built over with apartment houses. In every case they are hard to find and there is no time to spare. The men charged with the duty crawl over the wreck taking measurements. Then they draw plans; the plans are redrawn on the shaven floor and the templates are made. The outsider would say that this is about ten times more difficult than building a new ship. At the ship repair yards they take it in their stride:

"Yes,"—indifferently—"it's a little tough."

Exactly 61 feet of one vessel—the complete stern, including the rudder—stern frame, propeller, tail shaft and two lengths of intermediate shaft were lost. To guide their reconstruction, the repair crew had only a small scale outline of the ship, a deck plan and a photograph. Yet in 18½ days the ship steamed away, completely rebuilt. Another ship's keel was buckled by the torpedo's explosion. She sank.

Other ships have been raised, but that buckled keel presented a problem. After the vessel had been brought to the surface and buoyed and pontooned, the water was pumped out, just so. If too much water were left in one flooded section or pumped out of another, that twisted keel might have bent again and the vessel might have sunk again. In dry dock she was lowered to the blocks. Although the



ON TIME!

We are fully aware of the importance of "time table deliveries" in war production. Many of America's leading manufacturers entrust their precision tool problems to us because they have confidence in the accuracy of our work as well as the promptness of our service.

PRECISION
TOOL
MAKERS

THE **ELIOTT**
Manufacturing Co.
MILFORD, CONNECTICUT

bow had been nine feet two inches higher and the stern six feet six inches higher than the buckled part, every block bore its precise meed of strain. The flooded sections were drained, each in concert with all the others. When this had been done the entire keel had fallen into line. She is back at sea.

And some of that labor, mind you had never seen a ship before the men had been hired by the repair yard.

A stubborn tanker

THE U-BOATS fired a salvo at one of the world's largest tankers off the Virginia capes. For technical reasons a tanker is hard to sink, but, when the fifth torpedo tore the fifth hole, the after part went to the bottom. It was 300 feet long and carried the engines. The water was 32 feet deep. The nose of the tanker thrust out at the heavens as she skewed around on the heel buried in the sand. Any non-seafaring man would have looked at her and walked away.

The salvage crew cut through the few remaining plates and strength members holding the two parts together, bulwarked the forward end and towed it to port. The hinder end was finally raised by dynamics and bull strength. The engines were taken out, fixed up, and put back again. The two parts of the vessel were welded and rivetted together.

She's at sea.

There is the story of another tanker. A torpedo hit her from three points off her weather bow. That knocked off her bridge and pierced her forward tanks so that she listed heavily. The crew took to the boats. After an unwholesome shifting around in a rough sea they saw she was not going to sink. So they boarded her again, put a patch or two over a hole or two, got up steam, and began to waddle toward home. Then another torpedo hit her. The crew again abandoned ship. They tossed around in their lifeboats all night. At dawn the chief engineer said:

"There's a ship. Let's signal—"

The men in that boat were from the engine room. They signalled and swore when the ship paid no attention to them. Being engineers they did not recognize their own ship until they had hauled alongside. Being engineers they thereupon started the engines again, and half-drafted, half-drove to the coast of Africa. There a deal was made with native labor, mahogany planks were procured to cover her scars, and she got home. In two months, painted, strengthened and with new engines, she was on her way again. The repair crew did not even think it was a tough job. They did wonder a little at the linguistic abilities of the engineers who told a group of grass-hatted natives how to shape mahogany planks to fit the holes in her hull.

The foreign ships interned in our harbors when we went to war were comprehensively sabotaged by their crews. Three Italian vessels at Hampton Roads suffered considerable damage. The shafts were turned over in oil-dry beds. The boilers were burned through. Emery dust was fed into the bearings. These things were done by crews who knew just where to hit hardest and lowest. The repair yards used bronze welding

FIRST PAYMENT *March 15th*



**FOR HIS FOOD... HIS EQUIPMENT
... HIS SAFETY!**

The taxes you pay on March 15th are vitally needed to keep our armed forces supplied and sustained in their heroic task.

American industry is doing its job magnificently, meeting and solving the problems of design, production and distribution.

Now it has another kind of problem... and perhaps a critical one.

Taxes must be paid in *cash!*

Whether the amount be in the thousands or the millions, the disbursement in many cases is going to be a serious, perhaps crippling drain, on working capital, unless immediate auxiliary financing can be arranged.

If the imminent tax date is creating a real financial problem for you, we are prepared to consult with you and work out promptly a plan to meet the situation, at a reasonable cost and without interfering with management.

We are now providing millions of dollars to concerns supplying vital military and essential civilian needs.

Your inquiry will get immediate attention. Address Dept. 2302.

Commercial Credit Company Baltimore

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CAPITAL AND SURPLUS MORE THAN \$65,000,000

feeding the fires of FREEDOM



THROUGHOUT the ages Nature laid down in the earth of this land a vast storehouse of the world's finest bituminous coal — a power of progress in times of peace; a vital weapon in war.

Today, bituminous coal is the fuel that feeds our furnaces of war. It is the source of a thousand and one by-products that make the materials of war. Without it, America could not utilize and develop her great natural resources and industrial capacity — for war.

This nation's all-out production for total war demands an abundant and continuing supply of bituminous coal — and uninterrupted, mass transportation to move the coal swiftly and safely, whenever and wherever it is needed.

The Norfolk and Western Railway is proud of the privilege of serving one of America's great coal fields — fields that produce approximately one tenth of the country's annual bituminous output. This railroad is proud that it had the equipment, the experience and ability to move from mines along its lines during the past year, 53,000,000 tons of coal.

Bituminous coal is feeding our furnaces of war. It is feeding the fires of freedom! Nothing must be allowed to interfere with its production — and its transportation.

NORFOLK
and
WESTERN

Railway

CARRIER OF FUEL SATISFACTION

—which normally is not permitted—put in additional stiffening and in 4½ months the ships were at sea under their new flag.

The ghost fleet dating from the First War was hauled out of its marshy estuaries and refurbished at a cost of about \$200,000 each. A fleet of merchant steamers was bought from its peacetime owners and fitted for war uses. A great liner was floated into a drydock about a year ago:

"Make her into a workshop. Fix her so she can make anything or fix anything."

More might be said if the censor would permit. It may be said without correction that this sea-going workshop might, some day, be worth a plane carrier to some fleet. Or save a submarine to sink Japs another day. The fleet of small yachts has been equipped with gadgets that make them effective against submarines and coopered up so their crews can live on them for days at sea without the aid of Mothersill's.

Much more might be said about the Key Highway plant and the Todd Company's repair yards and all the rest of the yards where damaged ships are made fit for sea again.

But what's the use? On the day that much more is said some pretty girl with lovely legs will probably miss the ship being launched. A perspiring workman will snatch the bottle and crack it on the disappearing bow. She will smile at the press photographers and make the first pages. Who cares for those who only stand and wait?

Manpower— Revised approach

(Continued from page 32)

ployers with about 6,000,000 workers."

But all basic war industries include both essential and non-essential jobs. To solve this problem, W.M.C. has set an arbitrary standard:

If six months training is necessary before a new worker can attain reasonable efficiency in an essential job, that assignment is "critical." Thus, it is assumed that every plant soon will work out a Manning Table classifying every employee on a relative basis of indispensability. These Manning Tables, in preparation in various industries during the past three months, show that, even in war plants, only about one job in nine is really "critical" from the standpoint of training.

To objections that this program requires much costly paper work, W.M.C. responds there is no alternative, since every case must be resolved on merit before the Selective Service Board.

"After drafting the Manning Table," W.M.C. explains, "the employer will draw up a replacement schedule to direct him in up-grading, promoting and recruiting replacements for workers soon to be inducted. The employer will fill out occupational classification Form 42-A for all employees within the ages liable to military service for whom occu-



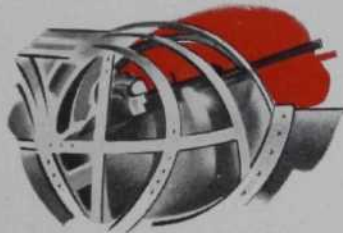
"... This award is your nation's tribute to your patriotism and to your great work in backing up our soldiers on the fighting front."

Robert P. Patterson

Under Secretary of War

SERVING THE ARMED FORCES

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POWER-OPERATED AIRPLANE GUN TURRETS

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Precision-built shell bodies and boosters for U. S. Artillery are contributing to the offensive power of our armed forces.



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The fighting power and split-second maneuvering of modern war planes depend upon precision-built electric motor controls.

AFTER VICTORY... Back To The Job Of Serving The Nation



ELECTRIC FANS

The most complete selection of quality Fans in America, with the famous 5-Year Guarantee, inaugurated in 1914.

ELECTRIC MOTORS

For household, farm, commercial and industrial appliances and labor saving machines. . . Also, for aircraft controls.

VENTILATING EQUIPMENT

Kitchen ventilating and attic cooler fans for homes. Exhaust and ventilating fans for industry and commerce.

A. C. ARC WELDERS

The most modern of metal fabricating methods is made universally available through these compact, portable units.

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pational deferment is then necessary."

For married men in the draft ages a different form, 42-B, must be prepared.

"This system will enable each employer to know, not only how many employees will be withdrawn from each department, but approximately when each withdrawal will occur, so that replacements may be recruited accordingly."

Pending completion of the Manning Tables in each plant, emergency deferment forms are available through local draft boards. Once the Manning Tables are transmitted to the State Selective Service Director, all boards will take the same action on similar job classifications.

Recent surveys indicate that some plants have called for many more new workers than they actually needed. When a plant takes new work, it is often difficult to estimate accurately the man-hours involved. For example, Robert P. Patterson, Under-Secretary of War, discloses that our large bombers originally were scheduled as requiring 110,000 man-hours each.

"When a contract for quantity production was placed, it was found that only 93,000 man-hours were required. Today, that plane is being produced with 27,000 man-hours."

The women will help

THE principal segment of increased employment in 1943 will be 2,000,000 additional women in war production work, making a total of 6,000,000 out of 20,000,000. Where union restrictions operate against adequate industrial training for women, W.M.C. will intercede.

Local Selective Service Boards also have been instructed to implement the transfer of men from non-essential to critical war jobs. On February 1, W.M.C. served 60-day notice that all men in non-essential jobs would be subject to draft after April 1, regardless of dependency status. The U.S.E.S. offices immediately were stormed by applicants seeking war assignments in industry.

This first classification of non-essential workers covered 29 occupations, mostly personal servants. In addition, 19 light manufacturing industries and wholesale, retail or service establishments were classified as non-essential. Both these lists will be extended from month to month.

Meanwhile, Congress has taken up anew the question of mandatory deferment for fathers, regardless of age or occupation. This legislative issue still is to be determined.

Manpower administration in agriculture has been transferred completely to the jurisdiction of Food Administrator Wickard, but he will still use the U.S.E.S. field offices controlled by W.M.C. Farm workers are deferred automatically upon a showing that the individual produces 16 "war units" of foods. For example, 15 acres of wheat equals one war unit. Therefore, a man farming 240 acres in wheat (a large order!) would be deferred.

On the other hand, one milk cow also is a war unit, so a man tending 16 milkers is automatically classified as an essential food producer. The following

table indicates what constitutes one "war unit" for various types of farm production:

MITE	PRODUCTION
Cotton	2 acres
Sugar beets	2 acres
Sugar cane	1 acre
Truck and canning crops	1 acre
Wheat, hay, and grain feeds	15 acres
Corn	5 acres
Fruit trees	1 acre
Flaxseed and soybeans	12 acres
Peanuts, potatoes and sweet potatoes	2 acres
Small fruits and berries	0.7 acre
Dairy cattle	1 head
Farm beef cattle	12 head
Feedlot beef cattle	20 head
Range beef cattle	15 head
Stocker beef cattle	75 head
Laying chickens	75 head
Broiler chickens	600 head
Hogs	20 head
Farm sheep	30 head
Feedlot lambs	160 head
Range sheep	45 head
Turkeys	40 head

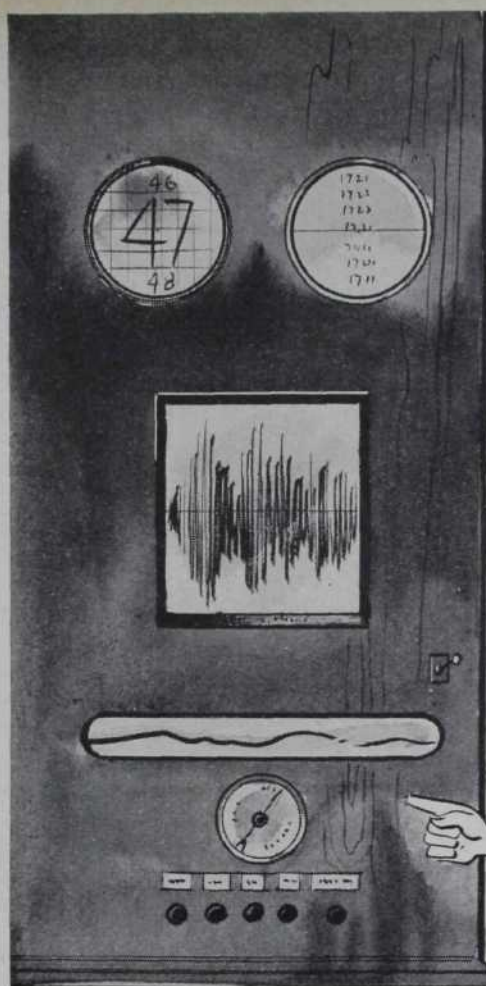
Among the farm products classified as non-essential, for which no war credit will be given, are cantaloupes, hops, popcorn, watermelons, squash, pumpkins, cucumbers, radishes, rhubarb, iceberg lettuce, and cotton grading less than one-inch staple.

Application of these values on approximately 6,300,000 farms ultimately will give a theoretical equation showing the number of men needed to produce the 1943 agricultural quotas. The task of recruiting that manpower still is being organized. Four principal approaches are under consideration: (a) importation of workers from Mexico, Puerto Rico, and the Bahamas; (b) shorter school terms in the rural areas to free children for field work; (c) mobilization of city crews for emergency cropping after factory hours and over weekends; and (d) temporary furloughs to permit soldiers from nearby camps to assist at the peak of harvest.

By various combinations of these methods, adapted to local conditions, Mr. Wickard hopes to give the farmers the equivalent of 1,500,000 additional full-time workers during the six months, April-September, inclusive.

Some members of the W.M.C. staff who have analyzed the overall manpower picture—military, industrial, and agriculture—still feel that only legislation authorizing compulsory job assignments can meet the needs. They estimate that six civilian workers are required for every man in military service. If experience proves that figure correct, our civilian working force must be expanded by the end of 1943 to 62,400,000 persons, against an estimated 53,200,000 available at the end of 1942.

In these terms, the job for 1943 would be to add 9,200,000 persons to our available working force, at the same time we are subtracting about 4,000,000 men for military service.



It figures your income tax



IN post-war years the trouble of figuring your income tax may be eliminated (the headache will probably remain the same) with the clever application of electrical apparatus. Just whether this would be an unmixed blessing, we are not prepared to state.

That there will be innumerable more applications of electrical science in after-war years is too patent a fact to be questioned. Just what their manifold functions will be is a fertile field for prophecy.

But whatever their form or function, if they are operated by electrical circuits and made to the highest order, you'll more than likely find Cannon Connectors playing a vital part in their operation.

Type P Cannon Connectors are universally used in radio, sound apparatus and allied applications. Other types of Cannon Connectors are used in a wide variety of wartime and peacetime industries including television, shipping, lumber, aircraft, motion pictures and in geophysical research; in fact wherever dependable connections are needed.



CANNON ELECTRIC

Cannon Electric Development Co., Los Angeles, Calif.

Canadian Factory and Engineering Office: Cannon Electric Co., Ltd., Toronto

REPRESENTATIVES IN PRINCIPAL CITIES — CONSULT YOUR LOCAL TELEPHONE BOOK

★ ★ ★ ★ ★ MORE GOOD NEWS FROM THE PRODUCTION FRONT

"Production, Production

GENERAL MOTORS REPORTS ON ITS FIRST FULL YEAR OF WAR ACTIVITIES

FIRST, AN APPRECIATION . . .

While the figures and statistics shown at the right are impressive, they do not tell the full story. They do not show, for example, the co-operation we have had from Army and Navy officials at every step of our progress toward the record production already achieved. Nor do they indicate the fine spirit of cooperation shown by our suppliers and subcontractors, on whom we rely for so much of the work.

They cannot convey an adequate picture of the eagerness of hundreds of thousands of General Motors men and women to back the courage and determination of our fighting men with an ample supply of the most effec-

tive fighting weapons in the world. They cannot give even a hint of the initiative displayed by our engineers and mass-production technicians in effecting manufacturing economies and efficiencies which have resulted in the saving of critical war materials and manpower, and which have already made possible price reductions amounting to hundreds of millions of dollars.

These are the practical results that come from encouraging individual effort and initiative—the American way of getting the job done. Machines alone cannot win the victory—it will be won by free men working and fighting together for the only kind of future worthy of America.

1940 and 1941 were years of defense production and of planning for the possibility of war. Pearl Harbor found this defense production well under way. With the declaration of war and the call for "all-out" war effort, General Motors concentrated its entire organization and all its facilities on war production.

The tremendous job ahead at the threshold of 1942 called for the "know-how" of all our engineers, designers, mechanics and managers, skilled and experienced in mass production. It required the retooling and rearranging of all our plants for maximum production of war products. It meant designing and building new machines, and tools to make them—training skilled hands to perform new tasks, and teaching the un-

skilled—building employment and payrolls to unprecedented peaks—organizing and enlisting the support of our network of thousands of suppliers and subcontractors. It also meant establishing and operating training schools to teach thousands of men in the armed forces how to properly service and maintain General Motors-built war equipment.

Now at the beginning of 1943 these basic tasks have all been accomplished, and during their accomplishment General Motors plants made and delivered a mighty, rising tide of war materials. That tide continues to rise with mass-production technique swinging into full stride.

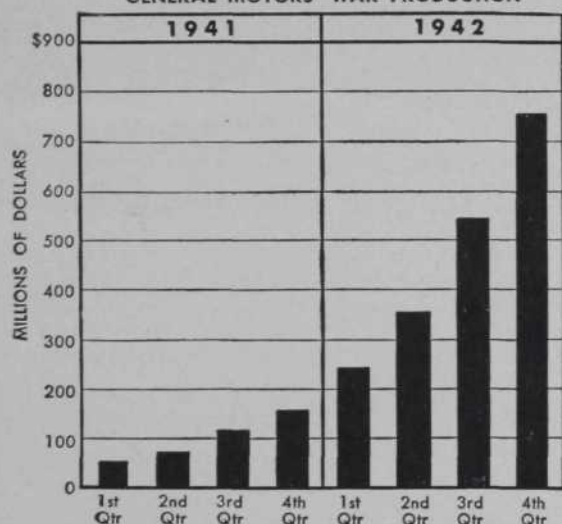
Thus General Motors answers our government's call for "Production, production—and more production!"

GENERAL MOTORS

★ ★ ★ ★ ★

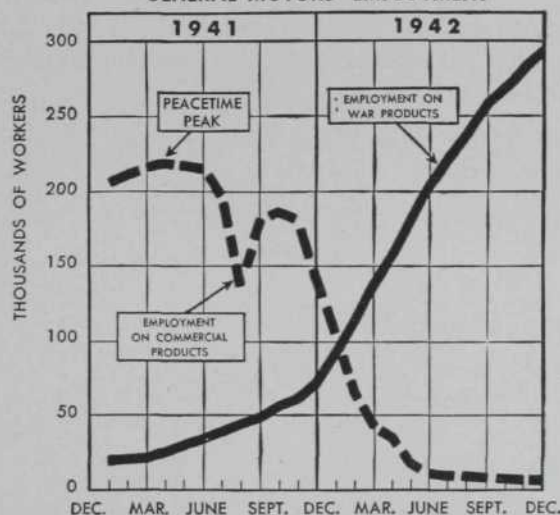
-and More Production!"

GENERAL MOTORS' WAR PRODUCTION



We regret that for military reasons we cannot report the number of guns, tanks, planes, shells, armored cars, trucks, Diesel engines for submarines and other uses, airplane instruments and hundreds of other items made and delivered by General Motors. We can say that in dollar value they totaled approximately \$1,900,000,000—almost two billion dollars—in the year 1942 alone.

GENERAL MOTORS' EMPLOYMENT



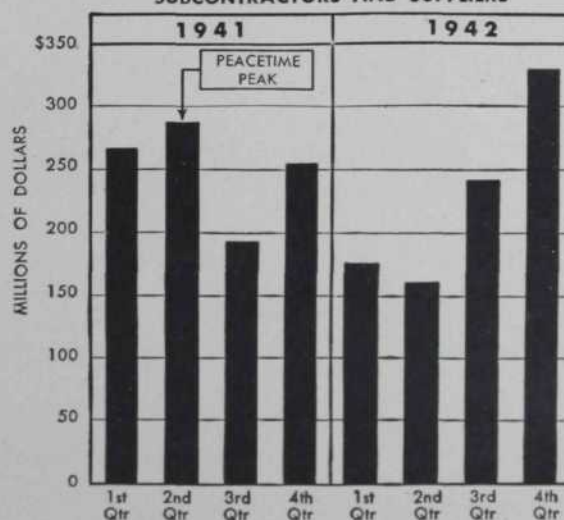
In June 1941, factory employment was 250,000—an all-time high. Since then, 50,000 replacements have been made, largely to replace men who have gone into the armed services, and 49,000 additional employees have been hired. To the 54,000 salaried workers employed in June 1941, 17,000 have been added. At the end of 1942 General Motors' employment reached 370,000—66,000 above the previous peak. It is anticipated that 100,000 will be added.

GENERAL MOTORS' PAYROLLS



General Motors' payrolls, like General Motors' employment figures, are at an all-time high in our 105 plants in 46 communities and 13 states—and five plants in Canada. The December 1942 payroll was \$88,000,000. This was 45% more than the peacetime peak in June 1941. The total General Motors payroll for 1942 was \$839,000,000—28% more than in 1941—the highest previous year.

GENERAL MOTORS' PURCHASES FROM SUBCONTRACTORS AND SUPPLIERS



The fastest, most effective way to distribute war work among the greatest number of producers is primarily through larger industrial organizations who have technical staffs available and who are accustomed to working with suppliers and subcontractors. Purchases from subcontractors and suppliers in the fourth quarter of 1942 were \$330,000,000, compared with the peacetime peak of \$288,000,000 in the second quarter of 1941.

BUY WAR BONDS FOR VICTORY

"Victory Is Our Business!"

"THE AMERICAN WAY WILL WIN"

What We Hope to Have . . .

	GOAL	
	1943	1942
	(THOUSANDS OF UNITS)	
GRAINS		
Corn, acres	95,000	91,000
Grain sorghums, acres	10,000	9,221
Oats, acres	37,300	40,600
Wheat, acres	52,500	53,427
Barley, acres	18,000	18,193
Rye, acres	3,600	3,868
MEATS AND POULTRY PRODUCTS		
Beef & veal, lbs.	10,910,000	10,160,000
Pork, lbs.	13,800,000	10,800,000
Lamb and mutton, lbs.	990,000	1,009,000
Chickens, lbs.	4,000,000	3,118,000
Turkeys, lbs.	560,000	485,000
Eggs, doz.	4,780,000	4,414,000
FATS AND OILS		
Peanuts, acres	5,500	4,173
Soybeans, acres	12,000	10,900
Flaxseed, acres	5,500	4,675
Lard, lbs.	3,400,000	2,500,000
DAIRY PRODUCTS		
Milk, lbs.	122,000,000	120,000,000
MISCELLANEOUS		
Potatoes, acres	3,260	2,845
Dry beans, acres	3,300	2,376
Dry peas, acres	725	530
Sugar beets, acres	22,500	24,005
Hemp, acres	300	

What Farms Will Face This Year

By DELOS L. JAMES

MEN, machinery and prices all are factors in a situation which means restricted diet for U. S.

of corn, peanuts, soybeans, grain sorghums, hemp, flax, sweet and Irish potatoes are being requested.

Significant also in determining the supply for 1943 is the Department of Agriculture's decision not to seek an increase in the aggregate acreage. The 340,000,000 acres harvested last year are considered the maximum practical limit. As a result, there is no possibility of being able to produce all that will be needed.

We'll eat cereals

IF ACRE yields are less than they were last year, total food supplies will be shortened and rationing of scarce commodities proportionately increased. The average diet will be less varied with a greater dependence on cereal foods.

Whether farmers can reach the goals set will depend on several factors, such as weather, manpower, machinery and prices. Unless some of these factors, particularly manpower, receive immediate attention, severe shortages of meats, dairy products, canned vegetables and fruits, and possibly other products are fairly certain. In the case of meats and dairy products, any shortage would be due, not to a feed shortage (except possibly a few high-protein feeds) but to an insufficient number of animals. That may be a direct outgrowth of the manpower shortage.

Plans for obtaining the maximum possible agricultural production are moving slowly. For many months the manpower shortage has been of growing concern. This shortage, estimated

THE CHANGE from a situation in which foods of all kinds have been abundant to one in which several important commodities such as sugar, meats and dairy products must be rationed has not been easy to understand, despite the frequent warnings of the past year. The public paid little heed to these warnings until the actual shortages made themselves felt.

Now there is considerable concern as to whether future supplies will meet future needs. To estimate how far this concern is justified it is necessary to determine just where we stand and what can be done about it.

To begin with, although 1942 crop conditions were exceptionally favorable and aggregate production was estimated at about 12 per cent above 1937's previous high record, civilian buying

power and military requirements also increased greatly. As a result, only in a few products will there be a surplus to carry over into another year. Increased production will be needed, therefore, in the case of a number of crops.

One of the Government's first steps to insure that 1943 production of agricultural products may, so far as possible, be adjusted to actual needs was to establish production goals. These provide for several important shifts in crop acreages to avoid further increases in the supplies of a few products and to insure adequate amounts of those most urgently needed. Specific reductions in the acreages of wheat, cotton and oats, of which there are surpluses, have been prescribed, while appreciable increases in the acreages

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-that's My War Job!"



"It takes manpower to MOVE manpower. And as one of the thousands of intercity bus drivers, I'm doing just that! I go where highways go to get you to your job of making guns, planes, tanks, ships.

If you're a farmer, you can count on me for those 'must' trips to town. If you are a selectee, I'll carry you to your induction center. If you are in the armed forces, you'll ride with me often. I'm in this war with all the skill I've got—proud that my specialty is moving manpower along the highways to Victory!"

Intercity bus lines were born in peacetime to carry you, your family and friends along scenic highways—to any spot you had your mind set to go. *Today these highways have gone to war.* And over them the bus lines are moving mass manpower in the same smooth, friendly, dependable way.

Supplying a flexible service that cannot be duplicated, the bus lines are fulfilling the needs of your community and your nation at the incredible rate of 750 million passengers per year—a volume of manpower vital to the winning of the war.

This flow of manpower must not be slackened! *Bus trans-*

portation must be kept strong and equal to its tasks. And the bus lines are doing their part by maintenance and operating miracles that save tons of rubber, fuel and steel—by expert dispatching that keeps buses working at top efficiency along 330,000 miles of highways.

With all their resources, the bus lines are concentrating on their wartime job—the job of serving the nation by serving you. And if adequate replacement equipment is made available, the bus lines, with your continued cooperation, will keep America's highways at work for Victory!



MOTOR BUS LINES OF AMERICA



VICTORY THROUGH "OIL" POWER

Never before has oil meant so much to American Industry. For oil is the key to smooth, efficient industrial production—without which the war could not be won.

Today every factory is geared for wartime production. Machines are operating on 24-hour schedules. And because there is less time for overhauls, and replacements are scarce—the hazard of breakdown is increased a hundredfold.

It is only good horse-sense, therefore, to protect mechanical equipment with the right kind of lubricants.

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Whether your job calls for one or many types of lubricants, Cities Service is ready to serve you with top-quality products and expert counsel.

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at about 3,000,000 men, results from the withdrawal of farm workers by the Selective Service system and the high wages paid in war plants with which farmers cannot compete at present price levels for farm products. The labor shortage is particularly serious on the medium-sized and larger farms which comprise one-third (2,000,000 farms) of the total farms and produce four-fifths of the total volume of agricultural products.

Various proposals have been made and some action has been taken to relieve the situation. Congress has directed that essential farm workers be granted deferment from the draft but, according to reports, this action has not been uniformly effective because local boards have interpreted it in many different ways.

New directives, designed to liberalize deferment of agricultural workers may reduce the future drain of farm labor to the Army but no blanket deferment for farm workers has been ordered or can be ordered under the Selective Service Act. There is, furthermore, no evidence that military authorities intend to follow the suggestion that members of the armed forces be permitted to return to work on farms.

Price enters the scene

TO CHECK the flow of labor to war plants, farmers must be able to pay higher wages. To do that, they must receive higher prices. Various decisions by the price control agencies toward higher price levels for farm products create uncertainty as to the Government's attitude toward this highly important factor affecting the food supply.

Recently, for example, a ceiling of \$1.00 a bushel was placed on corn prices. That is substantially below parity. On the other hand, floors have been placed under oilseeds, and prices of potatoes, dried beans, and fresh truck crops will be supported at not less than 90 per cent of parity. In addition, farmers who plant their assigned acreage of potatoes will receive supplementary benefit payments of 50 cents a bushel.

Farm leaders regard these moves as inadequate. They would rather be assured a definite price in the market place than get part of their pay in the form of a government subsidy. For example, in the case of corn, the assurance of a full parity price would be a greater incentive to production than is a lower price plus a subsidy.

There are, however, some favorable developments in the farm labor situation. One is a modification of the former requirement that farmers must agree to impossibly high wage scales, impractical limitations on

"RIGHT OF WAY FOR THE U. S. A."

One passenger— or one million

THOSE carefree days when a man could take a train almost as easily as he'd buy a morning paper are out for the duration.

Folks have to share the railroads with the Army and the Navy, just as they're sharing almost everything else these days.

We wish we could still offer you an unlimited choice of departure times and accommodations, *but more than a million and a half troops per month must be cared for first.*

That takes a lot of cars and a lot of locomotives.

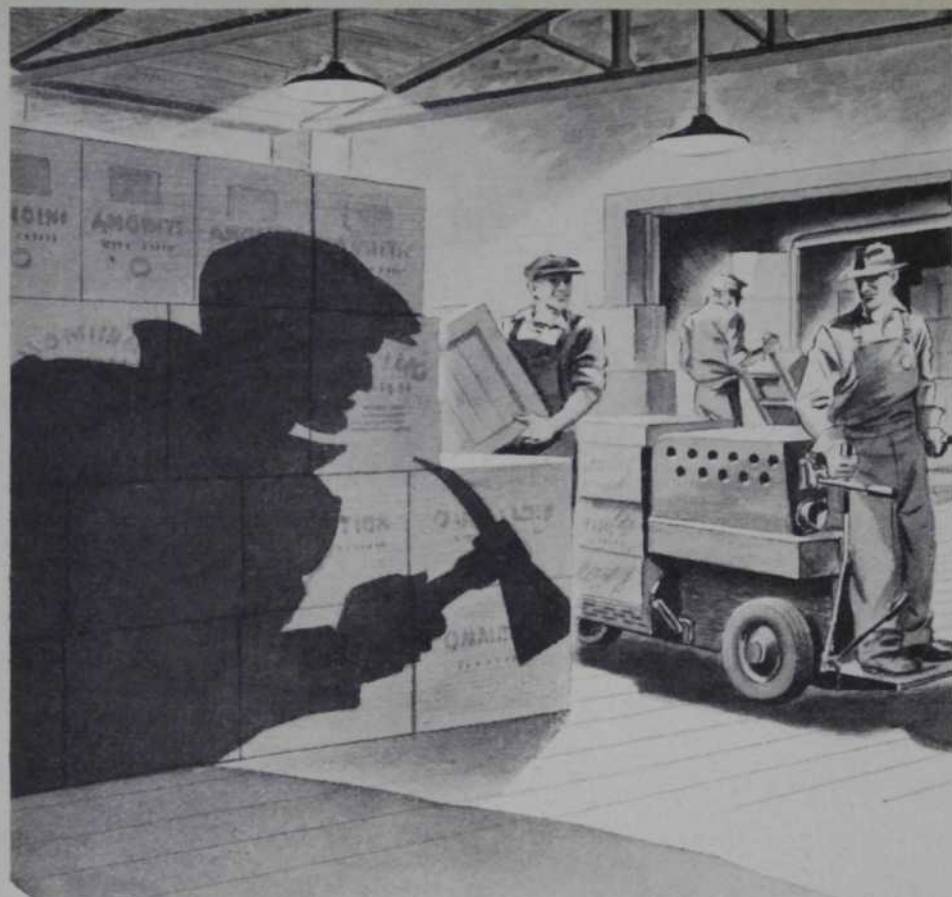
It takes the time of a lot of railroad men, for these movements must be handled swiftly and secretly.

After meeting all the vast demands of a nation at war, we are not always able to serve the public as well as we'd like to—but nevertheless, with a little cooperation, *we'll get you where you have to go.*

Transportation is our business as well as our duty—and we want you to know that every railroad man worthy of the name has his heart in his job.

Association of
AMERICAN RAILROADS
Washington
D. C.





Is a Saboteur at Work in Your Shipping Room?

■ Right now there may be a saboteur working in your shipping room. A saboteur that causes vital war products to be delivered in damaged or useless condition . . . that causes the needless waste of war production man-hours as well as war-winning materials.

You can banish that saboteur from your shipping room! Here's how: standardize on KIMPAK* for packing protection. KIMPAK is a remarkable protective material that guards large and small war products against breakage, chipping, chafing . . . that protects highly polished surfaces from

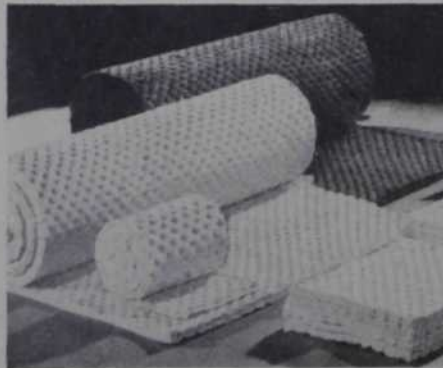
scratches, press markings, "burning".

If moisture is one of your shipping hazards, there's one type of KIMPAK that's made moisture-resistant to protect your product against water and dampness. Or if liquid-leakage from containers is your special shipping problem, there's another type of KIMPAK that absorbs up to 16 times its own weight in liquids!

Regardless of the size, shape or material of your product, there's a size and thickness of KIMPAK to protect it — and economically. Write or wire for information.

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hours of work, and other burdensome and unnecessary conditions before they can receive government help in obtaining labor. Another is the proposed importation of large numbers of experienced workers from Mexico and, if necessary, from the Bahamas to supplement domestic labor.

Machinery could help

ONLY slightly less serious than the manpower shortage is the shortage of farm machinery. Under orders from the War Production Board, production of farm machinery in 1943 was to be reduced to 23 per cent of the 1940 volume. The requirement that manufacture be concentrated made the effect of this reduction even more severe as it contributed to the break-up of long-established distributing and service organizations on which the farmer has learned to depend and which are essential to continuous and efficient operation of modern farm machinery.

Recently the War Production Board, impressed by the critical food situation, agreed to allocate more steel and other materials to manufacturers and thus increase the supply of essential types of farm machinery. Although this relief, if it comes, will be too late to help much in the spring, it may help to insure the harvesting of crops which otherwise might be lost. However, the possibility of replacing farm workers with labor-saving machinery in proportion to actual needs appears to be remote.

In the face of these factors which tend to reduce production, the need for production on a scale even greater than ever is most pressing. An adequate supply of food is essential for civilian use and these needs will continue at a high level because of the pressure of war work. In addition, government officials believe that purchases for the armed forces and lend-lease account will require about 30 per cent of the anticipated production.

Then, too, the promise of food is proving an influential factor in fostering the allied cause in occupied countries. If this good will is to be maintained, if we are to protect our own forces overseas, and if even minimum home requirements are to be met (due allowance being made for the shifts in diets that will be necessary under an extensive rationing program) it is apparent that immediate steps must be taken to check further drains of labor from the farms and that the equivalent of that which already has been withdrawn must be returned.

Furthermore, additional farm machinery must be made available as soon as possible to replace machines no longer usable and to help make available manpower more effective.



Owing to the character of the information contained in this portfolio, it is not for general distribution. It is available for review, through local Burroughs offices, to industrial and government officials directly concerned with war accounting problems.

"...a real contribution"



MANUFACTURING FOR WAR

The manufacture of aircraft equipment for the Army Air Forces, and the manufacture of Burroughs figuring and accounting equipment for the Army, Navy, U. S. Government and the nation's many war activities, are the vital tasks assigned to Burroughs in the Victory Program.

Long before Pearl Harbor, Burroughs technical systems and installation men were working with ordnance plants and war industries—with Army, Navy and government officials—to help them with their war accounting problems. As a result of the thoroughness and the outstanding work of these men, this Burroughs war accounting portfolio contains, we believe, the most detailed, comprehensive information yet compiled on methods and machines being used to handle practically every accounting procedure essential to the war effort.

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Can We Expect A Boom?

(Continued from page 23)

and bank credits were available with which to meet the costs of reconversion and rehabilitation. At the end of this war, the working capital position of many corporations may be impaired. Industries which are not in a position to participate extensively in war production may have greatly reduced earnings. While war industries may be in somewhat better shape, they will have to make large outlays for reconversion. It is too early as yet, however, to gauge the war's effects on corporation finances.

4. High corporate taxes. At the end of the First World War, business could look forward to an early tax reduction. Today little relief can be anticipated.

5. Unfavorable cost-price ratio in manufacturing. In the First World War, wage rates had not risen as much as the wholesale prices of manufactured products. Today the reverse has thus far been true. Moreover, raw material prices have advanced nearly twice as much as those of manufactured goods.

This unfavorable cost-price ratio has thus far been offset by the economies inherent in increased output. The difficulty will come after the war when manufacturing volume may shrink with no corresponding reduction in wages and raw material costs.

If wages and raw material prices should remain at or close to war-time levels, and wholesale and retail prices do not rise, the profit margin will be precarious.

FROM these comparisons of factors, what conclusions may be reached regarding the business outlook in the post-war transition period?

First: Will the situation be more, or less, favorable than in 1919? The answer is that the general outlook will be somewhat less favorable than it was then.

Second: How will it compare with the situation just preceding this war?

The economic situation in the first two years after the war is likely to be distinctly better than that of the late '30's. Large foreign needs and huge domestic replacement demands should mean a volume of production well above that of the immediate pre-war years.

The unemployment situation in the first two years after the war should be much less serious than in the years just before the war. In gauging the employment outlook one must bear in mind the prospectively larger production; the relatively slow rate of demobilization; the withdrawal from the labor market of women and aged workers; the return of youths to school; and the reduction of working hours.

It would seem that we might reasonably expect that the number of workers who would not be absorbed in normal productive activities would not exceed 3,000,000 to 4,000,000, as compared with 8,000,000 to 9,000,000 of unemployed in

the late '30's. If it were not for the unfavorable cost-price outlook in manufacturing, the prospective level of production in the replacement period might be considerably higher.

After the First World War, the Government played a minor part in demobilization and reemployment. Today certain types of government aid are now being considered:

A. The Government will doubtless attempt to dovetail the demobilization with the opening of opportunities in public and private employment. The plan is to keep the men in the armed forces until jobs are definitely assured.

B. The Government may be expected to participate extensively in physical reconstruction programs in foreign countries. The stimulus to export trade will thus probably be greater and last longer than after the last war.

C. The Government is planning to provide extensive employment on public enterprises. If our analysis of the probable magnitude of the unemployment problem is not seriously in error, the volume of public works required will not be stupendous. The most difficult problem will be to get the projects under way quickly enough to provide jobs when the need is greatest.

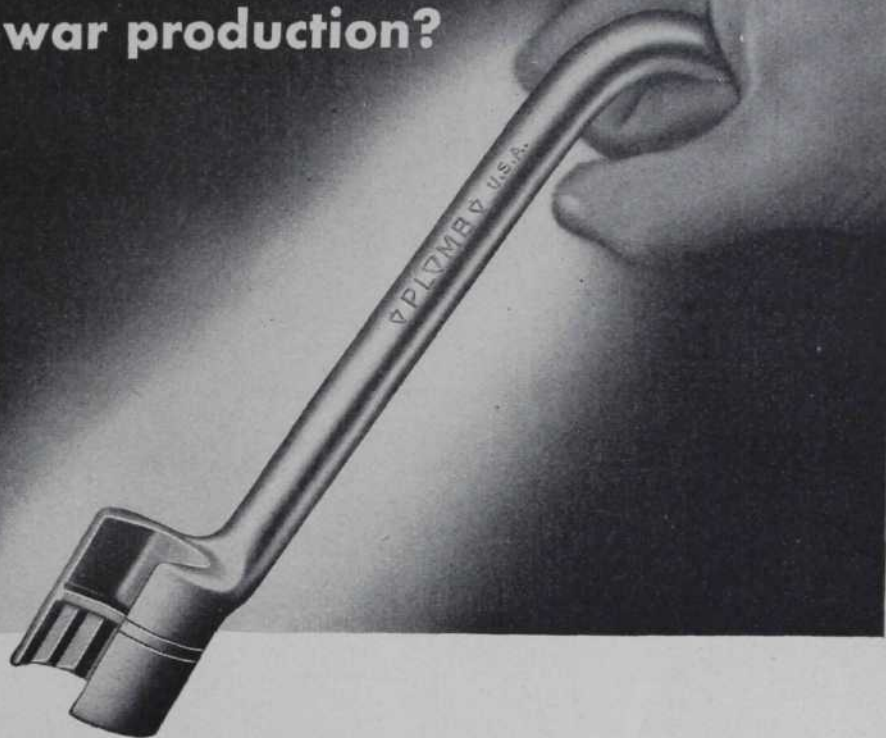
D. Another type of government action designed to stabilize the immediate post-war situation involves the continuation of rationing and price control. If the industrial situation proves "spotty," and if profit margins in general should appear dubious, this action might temper the forces of inflation.

If, however, the Government seeks to continue a comprehensive price control program, the effect upon the private economy may be adverse. Such a program would involve, not merely control of the prices of manufactured products but the relation between their prices and wage and material costs.

If—for political or other reasons—the prices of farm products and wage rates were supported at war-time levels, it would be necessary in many lines to raise wholesale and retail prices of manufactured products. If manufacturing enterprise is continually "squeezed," neither the incentives nor the funds with which to provide maximum employment will be available. One of the most constructive things the Government might do is to face this cost-price issue squarely and take the steps essential for its correction.

The first two years or so after a war, as past experience reveals, are the easiest, not the hardest. The real test of our ability to maintain prosperous conditions will come after the comparatively easy period of transition. Our future will depend on the progress we can make during the transition period toward eliminating basic sources of economic maladjustment. Unless genuine progress toward the solution of these problems can be made, we will find ourselves little better off than before the war. Indeed, we would be worse off because of added complications of a vast new public debt.

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Fine Hand Tools for All Industries



**PLOMB TOOLS CONTRACTING CO. A Division of the
PLOMB TOOL COMPANY
LOS ANGELES ▽ CALIFORNIA**

Paul V. McNutt's First Sergeant

(Continued from page 26)

Appley has the intense admiration of his son, Lawrence, who even now would rather talk about his father's career than his own.

Among other things, the elder Appley served in France (as an educational director) with "Black Jack" Pershing and is today the greatest living authority on the Delaware Valley, having been born and reared on the Delaware River and studied the valley all of his life. He is one of the few living men to shoot the Delaware rapids.

Along that early preaching itinerary of his father, Lawrence gathered an elementary school education. Then, he went to Mt. Hermon School for Boys in Mt. Hermon, Mass. (near the Mt. Hermon School for Girls), where teachers believed in the Old Time Religion and hard work. He added to that curriculum and his finances by cutting wood, hoeing vegetables, carrying coal, sweeping out the auditorium, and waiting on tables.

In 1923, he enrolled at Ohio Wesleyan, a Methodist college at Delaware, Ohio. After one year, he had to quit to pay some bills. He first taught all eight grades in a one-room, 35-pupil elementary school at Mahopac Mines, N. Y., then went to Broadway, where he was street car conductor on the old Green Line. He recalls now that he worked a

lot overtime, "but not at time and a half."

After nine more months of school, during which he worked in the cafeteria, he drove a Mack truck for money for the next year.

The next summer, he served as speed cop in the little town of Ashley, Ohio, near Delaware. Ashley, frankly, was a "speed trap."

The work was fun then, but he is not so proud of it today.

"I only hope none of those motorists ever learn where I live," he says today. "But, after all, Ashley needed the money to pave the streets."

He won his A. B. degree at Wesleyan in 1927, having majored in speech and studied such subjects as business administration, economics and sociology. It was there that Arthur Flemming, now U. S. Civil Service Commissioner, became a friend of his lighter moments, patron of his hashing activities and rival on the podium. They debated such long-time favorites as "Cancellation of War Debts," "The League of Nations," and "Do High Tariffs Contribute to Wars?" Appley won a membership in Delta Sigma Rho, honorary forensic fraternity. He also was a member of Chi Phi.

In college classrooms, too, he met Ruth Wilson, a pretty co-ed who lived in Delaware. They married three months

after he graduated. Meanwhile, he had attended Ohio State University for three months, but was not yet done with schooling.

Winning an appointment as an instructor in public speaking at Colgate University, he enrolled at Syracuse University 40 miles away. It was there, at a summer session on business administration, that he heard Dr. Herman Byle, who is still there, discuss industrial relations as a field for future leadership. The speaker so impressed young Appley that he sought him out for a long conference about the possibilities of personnel and industrial relations as a future for young men.

His ideas travel fast

CONVINCED that was what he wanted, he got a job as personnel manager of the Buffalo Division, Standard Oil Company of New York. His New York boss was Channing R. Dooley, known nationally as a pioneer in industrial personnel work. Today, as chief of the W. M. C. training-within-industry division, Mr. Dooley is taking orders from his former protege.

When Standard merged with the Vacuum Oil Company and became the Socony-Vacuum Oil Company, Inc., Mr. Appley was offered the position of educational director. One of his first acts when he moved to New York was to ride the old Green Line and gossip a while with his former cronies.

He was soon riding further than that. As supervisor of Socony-Vacuum's far-flung training program, he visited well-nigh every European and Near Eastern Country.

His ideas travelled almost as fast as he did because then, as now, Mr. Appley did not believe in a static personnel program. He points out:

"No automobile will perform in the same manner for different drivers, and no two of them respond alike for the same driver. Sailboats are like that, too. So are people. They all operate according to the same basic principles but all have individual personalities."

Putting that thought into practice, he evolved the management formula known popularly among personnel men as "The Appley Plan of Management," a system based on a way of thinking rather than a way of acting.

He has explained this plan in numerous magazine articles, but never more succinctly than in Bulletin No. 4 of the U. S. Council of Personnel Administration, entitled: "The Human Element In Personnel Administration."

He is the first to admit his plan is a mild plagiarism.

"Very briefly, it's nothing more nor less than the Golden Rule."

Writing recently in *Personnel*, publication of the American Management Association, of which he is vice president, he explained:

There is the main principle of good management in its simplest form. Why do we need more? Why do we require tons of books to explain something so simple? It can only be because of our stubborn human desires to write the rules our own way.

There has been so much written about

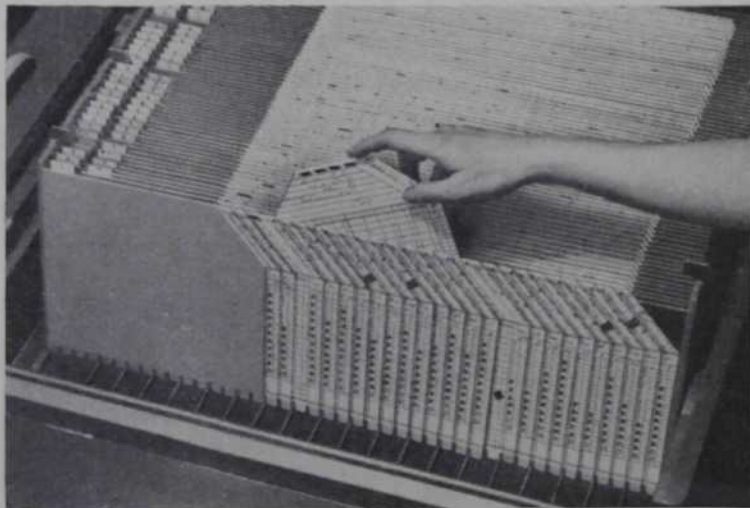
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Nothing makes a doctor feel better or gives him more satisfaction than seeing a patient well on the road to recovery. For the restoration of good health represents a triumph over obstacles that nature itself often sets up.

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Hemostatic Globulin is highly effective in the treatment of hemorrhages that sometimes occur after minor operations such as tonsillectomies and dental

surgery. In performing major operations, too, such as brain surgery, it is a boon. It is also of value in stemming the flow of blood from minor wounds and abrasions, particularly in accident cases where natural clotting is frequently delayed by shock. Finally, Hemostatic Globulin brings new safety to hemophiliacs, whose lives are constantly exposed to danger.

Hemostatic Globulin was developed and made available to the medical profession by the Lederle Laboratories, Inc., a unit of the American Cyanamid Company. Its discovery is a natural outcome of Lederle's continuing research in the fields of blood sera, blood plasma, vaccines, bio-

logicals and chemotherapeutic products. This work, so basic in man's relentless campaign against sickness and suffering, is an important and interesting phase of Cyanamid's many activities.



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ROARING IN with pursuit-plane speed, sowing devastation with heavy firepower and destructive bombload, the R.A.F.'s Martin bombers helped reduce Axis mechanized equipment to heaps of twisted scrap. That scrap is in Africa—beyond our reach. America desperately needs scrap here and now to charge this country's blast furnaces and help build more and more planes, tanks, trucks, ships, guns and bombs to continue carrying the fight to the enemy.

THE GLENN L. MARTIN COMPANY, BALTIMORE, U. S. A.

☆ **S**CRAP IS VITAL TO VICTORY. If you have even a few pounds of scrap metal in your home, you are aiding the Axis. If you think you have given all your scrap, look again more thoroughly. The scrap situation grows more acute each day, as reserves dwindle and the demand increases. Think of each piece of metal as guns to defend your home... as armor plate to protect your friends and relatives on the fighting front. Get your scrap into the fight... now.



Beyond the War's End

From stern sacrifice on the battle fronts and the home front, a great post-Victory world is being built... a world of new discoveries, new abundance. For instance, Martin has designs for giant airliners of 125 tons... is planning others of 250 tons and more. These are ships that will bring the whole world within hours of your doorstep... ships that will build for a truly permanent peace by making all nations neighbors. In war or in peace, keep your eye on the Martin Star!

Martin

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Builders of Dependable Aircraft Since 1909



"executive abilities," "administrative talents," and "managerial qualifications," and there have been so many arguments about whether leaders were born or made, that the whole field of leadership has been engulfed in mysticism. As a result, many actual and potential managers develop fear complexes and imagine complicated situations where none exist.

The truth is that leadership is a perfectly natural status in life. The world divides itself casually into leaders and followers. In any situation, such a division takes place, and no one can stop it. Civilization is bound to progress (assuming you have any faith in a Supreme Plan for the universe) and progress depends upon leadership. Natural selection generally will provide good leaders.

Philip S. Broughton, information director of W. M. C., who also used to be a college debater, describes Mr. Appley's philosophy of management something like this:

He's one of those people who have made a hobby of scientific management and is one of the foremost analysts of our day. Lawrence Appley looks upon management as nothing but human relations. He believes that a labor conflict usually can be traced to a conflict in administrative planning.

Mr. Flemming adds:

"He has a sound concept of management and the right kind of personality to carry out his principles."

Progress will be made

CONSIDERING his parsonage upbringing, his attendance at Mt. Hermon, his voice and general appearance, Mr. Appley would have made an excellent Methodist clergyman. But he is content just to be a church member. It is obvious that he wants to apply his religious ideals to his own life, but that he has no burning zeal to convert the world to his faith, although he is willing to make the facts available.

Personally, he has great faith that there is a Divine Plan behind the world, pushing us on toward progress, no matter what happens in any one generation. He believes that industrial personnel work will be lively in the future and that America has not yet reached its destiny, and may not in our generation, but that progress will be made.

Feeling thus, he has little patience with those who seek Utopia in a day.

... Some of us feel that the whole future of the world depends upon us—that, if we do not bring about perfection during our regimes, the world is doomed. If we would only stop to realize that competent people contributed to world progress long before our time and that there are capable people still to be born, we should be more sympathetic toward the idea of leaving something for posterity to do.

Let's make our contribution with as little fuss possible and in a simple and natural way. This does not mean we should work less hard, but it does mean that there is little merit in being busy just for the sake of being busy.

Activity is of value only in terms of attainment.

His wide experience in business and Government make many people believe that Mr. Appley's comments on contrasts, or similarities, of the operations of these two factors in our life are valuable. He will make no overall comparison

between business and Government, saying that it would take too much time, but he will say that he has observed no planned, concerted drive against business in Government.

"Rather, I have observed that there are a number of competent and intelligent administrators in Government, but that frequently they make bad mistakes due to lack of leadership and sustained directive effort," he says. "The faults... are too numerous to discuss, but one big factor I have noticed is the tendency to make up work where none is needed."

His W. M. C. secretary, Miss Margaret Carr, says "he is the most wonderful man to work for in the world." If you ask her why, she isn't any too definite, but you get the general idea that he never asks her to work longer than he's willing to work and that he remembers anniversaries.

Miss Harriett Lins, his secretary at Vick Chemical Company, who visits Washington occasionally, is even more enthusiastic.

"He's just tops."

Mr. Appley averages 70 hours work a week (but won't recommend this for everyone). He sleeps in the Shoreham Hotel on week-nights, but each Saturday night he goes to his home in Glen Ridge, to be with his wife and two little girls, Ruthann, ten, and Judith, born last November 24.

There he is besieged with telephone calls from friends, acquaintances and would-be acquaintances, covering the whole field of personnel relations. One mother wants to know whether her son

should do this or that to get a commission. A man has a new idea for mobilizing manpower. A youth wants to know why he has to be drafted right now, although he's in a war job.

"I wouldn't have anyone think I don't want those calls, although they prevent my getting needed rest," he says. "I wish that folks would learn to write letters."


However, he needs no more letters. He gets hundreds now and much of his time is spent in answering them. Some folks write him when they mean to write Paul Appleby, who is undersecretary of agriculture.

He has never been a candidate for office except that of the Glen Ridge Board of Education, on which he still serves faithfully. He is non-partisan, politically.

"I vote for men, not parties."

Mr. Appley is a member of the executive committee of the management division of the American Society of Mechanical Engineers and a member of the National Council of the Civil Service Reform League. In what spare time he used to have, he shot golf in the 80's.

He has yet to draw one dime of salary from the federal Government, serving always "W. O. C.," as they say in Washington, which means without compensation, except that he is allowed travel and other expenses. But he'll live. Newspaper reports at the time he became vice president of Vick Chemical Company were to the effect that he was "one of the highest-paid vice presidents" ever to become connected with that company.

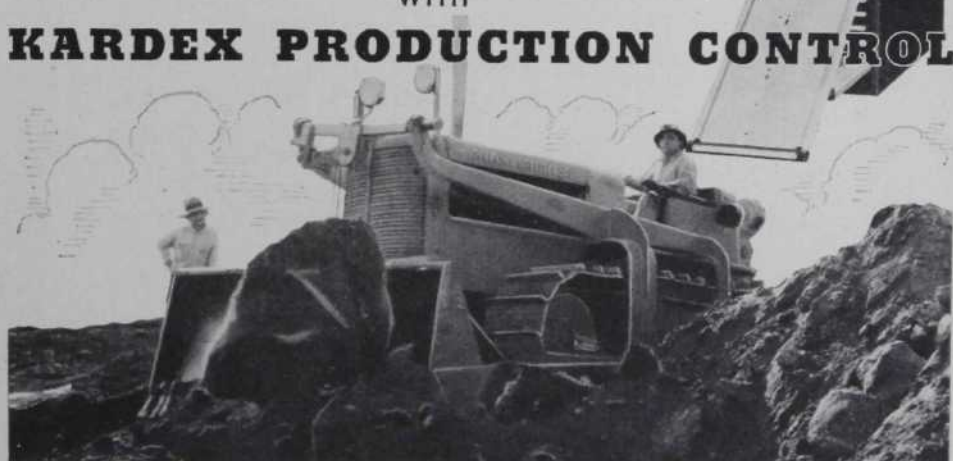


ALLIS-CHALMERS

SWELLS TRACTOR-POWER
ROLLING TO VICTORY

WITH

KARDEX PRODUCTION CONTROL



"FACT-POWER" ON THE FACTORY FRONT:

Kardex Production Controls
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Kardex for every production problem

Serving America's Victory Drive

REMINGTON RAND INC.

KARDEX
visible systems of
ADMINISTRATIVE CONTROL

It's the "Special Touch" that makes tires last

Your tires are a part of your automobile. Because that is so, tire life is influenced by many things.

Proper tire pressures vary from make to make and often wheel to wheel; your General Motors dealer knows exactly what yours should be.

Wheel alignment requires as many as six separate adjustments per wheel. Your General Motors dealer is fully equipped to make all of them properly.

Your brakes, your shock absorbers and other car parts can affect tire life if they are not in proper adjustment or condition. Your General Motors dealer makes it a business to know proper adjustments and maintain them.

Almost any car owner can *lengthen* tire life by regular attention to some of these matters.

GENERAL MOTORS

CHEVROLET • PONTIAC • OLDSMOBILE

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But in times when tires must last from now to an indefinite date, it is not enough merely to *increase* tire mileage — the aim must be to get the very maximum through skilled attention to all.

It takes an expert's special touch to assure that. Why not simply put it up to your General Motors dealer to look after your tires and your car — and be sure of a job done right?

★ ★ ★

The *Automobile User's Guide* answers questions about taking care of your car and tires in wartime. For a free copy see any General Motors dealer or write Customer Research Staff, General Motors Building, Detroit.

GENERAL MOTORS DIVISIONS NOW PRODUCING:

Aircraft Engines • Airplanes • Airplane Parts • Bomber Sub-Assemblies • Military Trucks • Armored Cars • Rapid-Fire Cannon • Machine Guns • Diesel Engines • Shells • Tanks and Tank Parts • Propellers • Cartridge Cases • Gun Motor Carriages • Gun Mounts • Fire Control Devices • Electrical Equipment • And Many Other Wartime Essentials.



Working together
for
**TOTAL
VICTORY**

TOP THAT TEN PER CENT! Put 10% or more of your pay into War Bonds every payday!

Business in a War Zone

By KEN PEARSON

A TOPSY-TURVY world where two a. m. is as lively as noon and money flows freely

THE HUM of prosperity is on every corner.

... At 5:20, five minutes before closing time, a man in overalls swinging his lunch pail walked into a San Francisco jewelry store.

"Let me have that set of silverware you advertised for \$150," he said.

"Just a moment," the clerk replied. "I'll get some patterns for you to choose from."



In a few minutes he was back with \$650 to pay for the coat

"Oh no," the workman said. "Give me the one shown in the ad. My wife likes that. Besides, I parked my car in the yellow zone outside. Left the motor running. Here's the money. Wrap it up..."

... A workman picked out a hat for \$8.50 in an Oakland store. Paid for it with a \$10 bill. As the salesman put the hat into a bag, he said, "Your change will be back in just a moment." The workman chuckled.

"Can't be bothered waiting for that small change." And off he went...

... A poorly dressed woman accompanied by her husband in working clothes, walked into the fur department of a San Francisco department store. She picked out a \$650 fur coat.

Her husband said, "But honey, I have only \$400 with me. Wouldn't you like that coat over there, or that one over there?"

She replied, "This is the one I want, this \$650 one."

He said, "Wait a minute. I'll see if Al has any money with him."

In a few minutes he was back and paid \$650 cash for the coat...

Expensive sets of silverware bought while the meter runs in the car at the curb! Workingmen not bothering to wait for \$1.50 change. Six hundred and fifty dollar coats paid for in cash! As the stories multiply, the ghosts of 1928 rise again in 1943!

Prosperity sings its tumultuous tune through the San Francisco Bay area, and other war zones like it.

If you have two arms and one leg, you have a job. And you're making, in most cases, a far higher earning than you ever made in your life before. Tinned men and women flood the trolleys and busses, just prior to the shipyard shifts. And just after, money pours out in a stream.

Normal waking and working hours are tumbled upside down. Approximately 100,000 workers are on the day-time shift from seven o'clock to four. About 50,000 are on the swing shift from four o'clock to midnight. About 25,000 workers are on the graveyard shift, from midnight to seven.

The strange spectacle of women in men's jobs confronts one at every turn. Driving taxicabs, street cars, busses. Working in grocery stores. Making deliveries. And in the early dawn, dressed in coveralls and carrying lunch tins, racing for the bus to the shipyards.



A small piece of meat brings a crowd around a butcher's counter



"Can't be bothered waiting for the change," he said, and off he went

Pay rolls for shipyards and manufacturing industries are, of course, far higher than anything known in recent years. In October, 1942, the average shipyard wage was \$57.27 a week, an hourly average earning of \$1.30 for an average work week of 43.8 hours. Specific skilled trades in the shipyards, such as welding, electrical work, boiler-making, are much higher than the average.

Contrast these figures with those of May, 1941, when men working in the Bay area shipyards made as little as \$26.92 a week, averaging only 24.9 hours in their work week.

Meat draws a crowd

TOTAL number of workers employed in manufacturing industries in this area increased from 87,000 in February, 1941, to 223,000 in October, 1942.

With this upsurge in employment and pay rolls has come a sudden rise in the cost of living. The averages issued by the State Department of Industrial Relations (12 per cent in the past year, 22 per cent in the past two years) are deceptively small increases because they include many general merchandise commodities on which there are price ceilings.

Food prices on which there are scattered ceilings have shown startling increases. In a comparatively short time, butter rose from 36 cents a pound to 65 cents. Eggs rose from 28 cents a dozen to 62 cents, when and if they are available. A fruit like cranberries was 12 cents a pound, now is 33 cents. Lettuce tripled in price, from five cents for a medium-sized head to 15 cents.

A small piece of meat brings a crowd around any butcher's

Note the CARBINE...

"a weapon of great merit"

"Little has been said of the new army carbine, but we believe it to be a weapon of great merit. It is a short rifle, 36 inches long, and 5 pounds in weight, half the weight of the ordinary rifle. All the men and the officers in the infantry who have been armed with the pistol will carry the carbine instead. That includes sergeants and all commissioned officers up through majors. It holds 15 cartridges in the magazine and is semiautomatic, like the Garand rifle. It fires a .30 caliber cartridge and is accurate up to any distance that soldiers usually fire at the enemy. We are beginning to get production in volume."

ROBERT P. PATTERSON, *Under Secretary of War.*



TO OUR MILLIONS OF VALUED CUSTOMERS: Accounting and adding machines are still available (under WPB regulations) for purchase by plants engaged in war work.

Our maintenance service from coast to coast, which you have come to rely on, is being kept in complete and efficient operation.

Spare parts, too—we are providing for all your Underwood, Sundstrand and Elliott Fisher machines—as well as a complete line of carbon paper and ribbons, unsurpassed in quality, for every make of office machine.

UNDERWOOD ELLIOTT FISHER COMPANY, One Park Ave., New York

★ Enlist Your Dollars Buy More War Bonds To Shorten The Duration

Winchester carbines are now in mass production by

Underwood Elliott Fisher Company

Former and Future Makers of Typewriters, Adding and Accounting Machines

counter. Housing conditions are becoming critical, particularly for new families. Families of six and eight live in small stores and basements—or, if the worst comes, sleep in their cars. People are reported buying houses without even asking to see the interiors.

Just as these newcomers must acclimate themselves to a new land, so they also bring new habits to that land. Many have no reading habits, either newspaper or books. Much of the time, as one of them put it, they are "too damn tired to read anything." To keep up with current events, they depend mostly on flash news from the radio.

Many of the new arrivals have come to this Pacific Coast area from small towns in the Middle West. Approximately 1,000,000 newcomers came into California in 1942 in out-of-state cars.

An additional 500,000 are reported to have come in by bus.

The living of these people and their families rearranges itself into new patterns. For instance, the swing shifters

leave their jobs at midnight ready for relaxation and a good time. In the early hours of the morning, they throng the streets of Oakland and San Francisco. It is as though every 2 o'clock in the morning is noontime!

The graveyard shift, completing its work by seven A.M. finds what would be its typical evening fun in the morning hours!

They buy and buy

HUGE wages for many people accustomed previously to subsistence incomes have brought a carefree abandon in spending. Retail sales in the San Francisco Bay area, along with those in Seattle and Portland, are outstripping all other sections in the West.

In the Bay area, the Federal Reserve figure for 1942 showed a 29 per cent increase. This is phenomenal when it is recognized that it includes many business houses involving lines in which merchandise is either greatly curtailed or com-

pletely unavailable for civilian consumers.

In the middle of 1942, government regulations on charge accounts caused a decided rearrangement of cash and charge business everywhere, and especially in this area. In October, 1941, this average relationship was cash and C.O.D., 47 per cent; regular charge, 43 per cent; installment, ten per cent.

By October, 1942, this had rearranged itself: cash and C.O.D., 57 per cent; regular charge, 35 per cent; installment, eight per cent.

All of these deviations from the peacetime normal are starting new trails of working, living and spending throughout this and similar areas. Undoubtedly many habits of living formed now will be forgotten when peace comes. But who can say which ones will remain, which be dropped entirely, which modified. There can be no doubt that some of them will leave their indelible marks on the post-war patterns, in many ways earmarking a new and different phase in the American way of life.

Shipyard Styling for Safety

Feminine tastes combined with utility in new coveralls designed for Kaiser's women workers. Women on the ways have their way on clothes

A CAREFULLY-PLANNED, attractive coverall designed especially by a stylist for shipyard women workers is helping more than 1,000 welders and burners in Henry J. Kaiser's Oregon Shipbuilding Corporation at Portland to be chic and safe on the job.

Lunch-pail gossip about work clothes led Mable Siegfried, reporter for *Bo's'n's Whistle*, yard publication, to consult petite Elsie Foster, forewoman of the women workers.

They took a poll, which revealed that women on the ways are tired of ill-fitting men's hand-me-downs, want sturdy, stylish clothes of their own.

The poll revealed that:

More women wear girdles than don't.

They think slacks are dangerous and impractical.

They prefer high-laced, military-type boots.

They don't want to look like men "or worse."

They prefer durable, more expensive clothing.

In short, they want to be safe, comfortable, smart, but sexless, while working at their war-time jobs.

So sketches incorporating the most popular ideas were shown to the women workers, for more criticisms. Then the "perfect" garment was designed. It has taken the women workers on the wharves by storm.

The new shipyard suit is a one-piece coverall, belted to make it seem a two-piece garment. It has concealed buttons,



Lunch time gossip about clothes led to a poll, after which a stylist was called in to design work clothes that women liked

a zippered cigarette and coin pocket, roomy slash pockets in the trousers, a snug-fitting collar and a strap that buttons around the ankles. An extra-long shirt-tail gives double protection over the hips and the patented side fastening of the drop-seat, which is attached to the self-fabric belt, makes the garment adjustable to all figures. It's made of water-repellent gabardine.

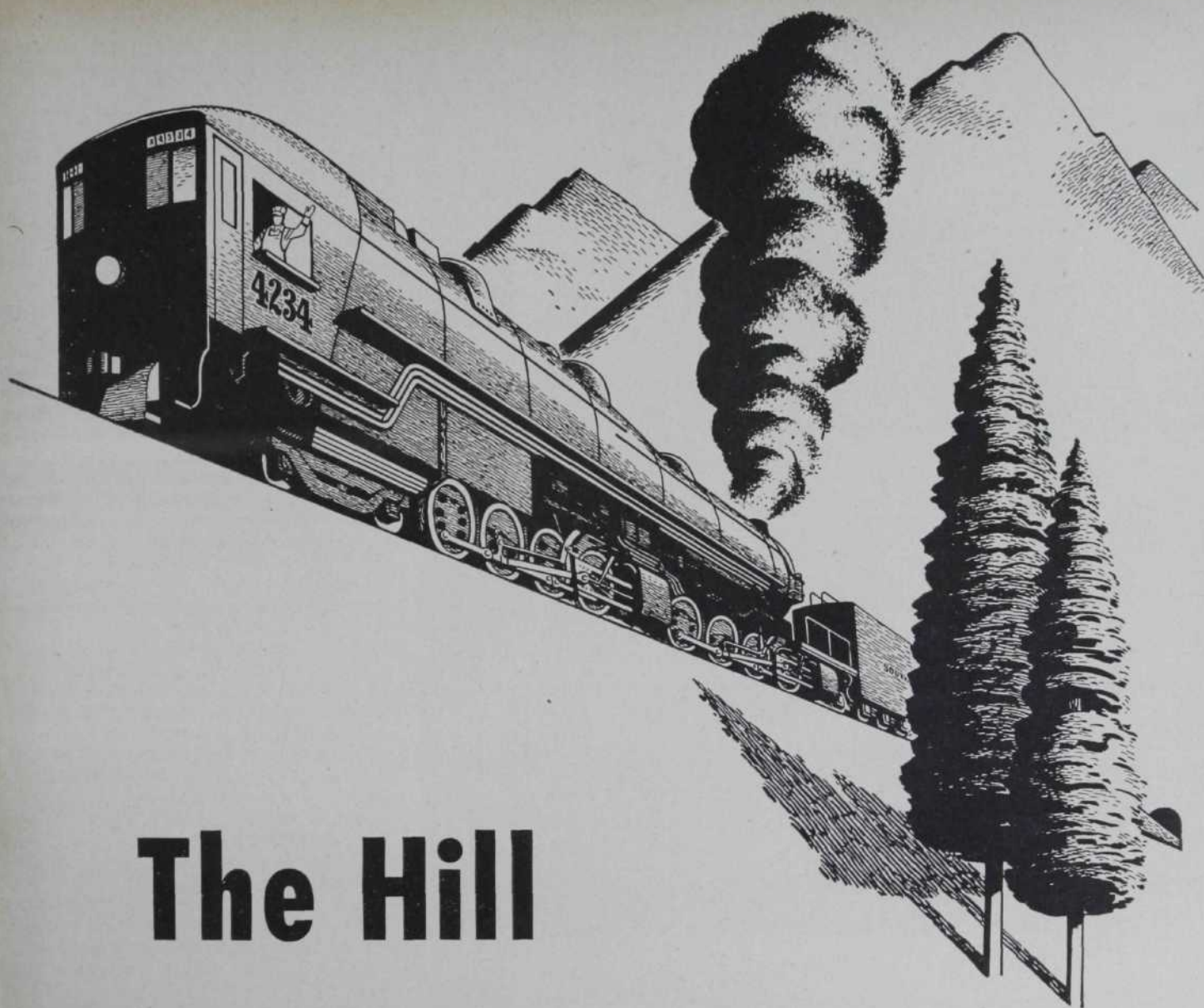
It fits Government regulations, too,

which require that the hair of women welders must be bound, and make taboo all jewelry, high-heels, open toes, and inflammable cellulose or silk garments in the interests of safety.

Everything that tends toward glamour is missing from the new suits except glamour, of course.

Male shipyard workers voice no objections to the change.

—VIRGINIA SHIRLEY.



The Hill

Most Californians call it the Donner Pass over the High Sierra, on Southern Pacific's Overland Route. But to every railroad man on our Sacramento Division, it is "The Hill." There's no tougher stretch of railroad in the country.

From the rolling country east of Sacramento, the double track begins to climb toward the gentle foothills that hide the summit ridge. But the grade is deceptively steep, and at Roseville the big cab-in-front locomotives are coupled on.

With exhausts roaring and sixteen drive wheels charging, the great engines assault The Hill. Through Rocklin, Newcastle and Auburn, through Clipper Gap and Colfax and Gold Run—the way stations of the Forty-Niners—through Dutch Flat and Emigrant Gap to the 7,000-foot summit, with Donner Lake shimmering far below.

From the summit you can hear the monsters coming up the grade, their far-off whistles echoing in the granite canyons. You can feel the stirring pulse of a railroad at war—the grim determination of the big engines and the men who run them.

There isn't a man on The Hill who isn't proud of the kind of railroading they do there, proud of the way they keep the line open in spite of everything that Nature can throw at them.

If you've ever been routed out of a warm bed to help man a work train or a rotary snow plow, you know why being a rail-

road man is a lot like being in the army. Every one of us is on call 24 hours a day to keep 'em rolling.



The Southern Pacific system extends from the Torrid Zone (Guadalajara, Mexico) more than half way to the North Pole.

S·P

The Friendly Southern Pacific

Headquarters: 65 Market St., San Francisco, California

ONE OF AMERICA'S RAILROADS—ALL TOTALLY MOBILIZED FOR WAR



"Soldiers come first these days, Dad!"

"Yes Mary, we certainly can afford to wait a few minutes for our train. The Seaboard gives troop trains and war supplies the right of way. And good reason, too."

"That's all right with us. We can wait—soldiers can't."

SEABOARD RAILWAY

**WORKS
FOR
VICTORY**



THROUGH THE HEART OF THE SOUTH

Where Size Blunts Efficiency

(Continued from page 25)

Here's why:

The War Department, for example, requires private plants making munitions to maintain staffs of guards. The number, a military secret, reaches thousands. The department reimburses the plants for the guard salaries.

Everyone knows that both the Army and the Navy have leased or bought ships, docks, warehouses, hotels, and the like. The staffs and crews of many of these facilities are still considered to be private employees although they are working strictly for Uncle Sam.

It may be argued further that employees in the great plane, tank, and gun factories are federal workers in the strict sense of the word. Many of these plants were built with federal money and Government tells the operators when, how, and what to produce.

In World War I, soldiers did many jobs that civilians are doing today. Several hundred thousand civilians today are building and servicing cantonments and training centers. If an administrative order should transform all these workers into soldiers, it would mean a larger army. The manpower problem would be aggravated as many of the civilian employees are women and older men. The taxpayers would pay as much, if not more, in the long run.

In any event, it becomes obvious that the 3,000,000 figure could be changed many thousands either way overnight.

Even the most rabid expansionists in Washington have been flabbergasted by the mushrooming of Big Government. Congress is talking about reducing the number of civilian workers, but don't be misled. The chances are 100 to one against it. Most of the Congressmen who complain about Big Government will continue to vote to make it bigger. That is the realistic outlook.

Why no one acts

I KNOW of a bureau that was recently abolished years after its usefulness had expired. Despite the manpower shortage, more than a score of congressmen protested vigorously the bureau's demise, among them two senators whom the public regards as front-line economy advocates.

After all, Congress has voted money to build additional air and supply depots, additions to arsenals, Navy yards, and new air fields. These vast projects must be staffed. That will take many more civilian employees. The congressman who votes against operating an airfield after it has been built will be accused of hampering the war effort. No one now wants to invite that accusation.

The cold truth is that the only thing that can stop the growth of Big Government is the end of the war. Unless peace comes sooner, the number of civilian employees is expected to reach 3,750,000 by July 1, 1944.

Of these, less than one out of ten will

be in the Capital. Many cities now have more federal workers now than Washington had in World War I.

Most of the people I know in Government are convinced that it's easily possible that Uncle Sam could do everything he does now, and do it better, with fewer employees. Yet these same people criticize the attacks of Big Government. They contend that no one has come up with a workable plan for reduction.

What's needed, it seems to me, is a radically different approach, a different philosophy, toward the operation of Government among the employees themselves. Premiums must be placed on efficiency.

Size, not efficiency

IN wide-open Big Government all the emphasis is on expansion. It's to the interest of the official or supervisor to build up a larger staff. It means a better title and a higher salary.

In any annual report of a Cabinet officer or agency head, you'll probably find something like this:

"When I became head of this department there were 20,000 employees. Now we have a staff of 30,000 loyal and hard-working employees."

In Government that's viewed as an accomplishment.

This concept must be changed if we're ever going to reduce the number of workers and still do the essential work.

Turnover in Big Government has been fantastically high during the past year. Over some months it was running 83 per cent in Washington and around 50 per cent in the field. Practically all the employees resigned voluntarily. Few people in Government are fired even for incompetence.

The governor of the Farm Credit Administration, for example, even if he caught one of his farm mortgage collectors in a red-handed theft would have to go through a long rigmarole in the Department of Agriculture before the thief could be struck from the pay roll.

As for the cause of idleness in Big Government, employees who complain of nothing to do tell one of two stories:

1. Their offices were built up to take care of the maximum work load and, instead of being transferred to busy offices when work slackened, they were kept on and given little or nothing to do.

2. They failed to perform satisfactorily some job assigned to them. Instead of being fired or transferred they were ignored and given little or no work.

Too many people in Big Government have adopted the attitude that Big Government owes them a living, that they should be soft and easy, that no employee or official should be offended, that they aren't paying the salaries out of their own pocket so why should they worry about the number of employees.

These concepts are inherent, deep-rooted, and exist in almost every department and agency in and out of Washington. They must be changed before Big Government can be trimmed down. War or no war, the issue can't be side-stepped much longer and, if it isn't met forcefully, the public can't be blamed for demanding, as Luther Steward fears, that the "damn rascals" be cleaned out.

SPONGE IRON

CAN LICK STEEL SHORTAGE



**NORTH CAROLINA'S COAL AND IRON
DEPOSITS FORM IDEAL COMBINATION
FOR PRODUCTION OF SPONGE IRON**

"SHIPBUILDING contracts have been canceled, munitions and other war production has been retarded, and military programs have been altered downward for want of steel***." (*U.S. Congressional Committee for Investigation of the Steel Shortage Situation.*)

Tens of thousands of North Carolina boys are in the Armed Forces, and North Carolina wants those boys and their comrades-in-arms from other states to have the tanks, the planes, the guns and the ships that will assure them Victory . . . Victory that is possible only if the steel shortage is ended.

In North Carolina are millions of tons of magnetic iron ores suitable for the production of sponge iron. North Carolina has untapped coal deposits of chemical composition and physical properties suitable for iron production. In some areas coal

and iron are found in the same deposits.

The U. S. Bureau of Mines has reported, after tests:

"The by-product yield of this coal is entirely satisfactory . . . reasonable to expect a 70 per cent yield of metallurgical coke, 10,000 to 12,000 cubic feet of good gas, 11 gallons of tar and 25 to 27 pounds of ammonium sulphate" per ton of coal.

Sponge iron can lick the critical steel shortage. North Carolina is an ideal location for sponge iron production. Away from congested centers, yet close to the richest consuming markets, North Carolina has the further advantages of native-born labor, ample power, mild year-round climate and excellent transportation facilities. Write today, Commerce and Industry Division 3068 Department of Conservation and Development, Raleigh, North Carolina.

NORTH CAROLINA

Our Own Social Security Needs

By MARION B. FOLSOM



Although social insurance can prevent hardships of old age or unemployment, there are many things which it cannot do

SOcial insurance plans cannot be an important factor in achieving a high level of employment after the war or at any time. They can, however, play an important part in maintaining a minimum income and in preventing hardships and want due to unemployment, old age or illness.

A good start has already been made in developing sound plans in this country. This year, with high employment, would seem to be a good time to extend and improve these plans. If changes are to be made, it is appropriate that business men and others should bring their common sense and judgment to bear in helping officials, legislatures and Congress in making them.

Already there is a good bit of thinking on this subject. The Beveridge report on social insurance plans of Great Britain has aroused considerable interest here while Social Security Board officials and others have outlined general proposals for extending American plans.

In whatever is done, two basic principles of social insurance should be

kept in mind: The plan should provide benefits at the minimum subsistence level, with the incentive and opportunity for the individual to add voluntarily to these benefits, and the plan should be contributory.

Since any improvements made now would be helpful in meeting the situation which is likely to arise immediately after the war while industry is being shifted back to civilian production, it is not too early to review the entire social security situation to see how we may best meet the objectives we have in mind.

In his report, Sir William Beveridge recommends that all the social insurance plans be consolidated into one overall plan and proposes a number of changes or extensions in present plans.

If carried out, his plan would include: retirement pensions, unemployment benefits, disability benefits, maternity benefits, benefits to widows, marriage grants, funeral grants. Medical treatment is covered under another plan.

These principles are clearly brought

THE BEVERIDGE Plan forms a good background for study but it cannot be taken as a complete model for an extended American program.

out in the following extracts from the Report:

... they do not touch the main problem of maintaining employment. For that other measures are needed. Unless such measures are prepared and can be effective, much that might otherwise be gained through the plan for Social Security will be wasted.

It is, first and foremost, a plan of insurance—of giving in return for contributions benefits up to a subsistence level, as of right and without means test, so that individuals may build freely upon it.

The State in organizing security should not stifle incentive, opportunity, responsibility; in establishing a national minimum, it should leave room and encouragement for voluntary action by each individual to provide more than that minimum for himself and his family:

In so far as voluntary insurance meets real needs, it is an essential part of security; scope and encouragement for it must be provided.

Development of voluntary insurance and saving among persons of limited means is desirable also from another point of view. Material progress depends upon technical progress which depends upon investment and ultimately upon savings.

The costs would be met by contributions from the employer, the employee, and the State. These plans would be extended to cover many new workers such as housewives, employers, traders and independent workers. The most drastic change proposed is the payment to the family of allowances for each child after the first, with the Government bearing the entire cost.

Four general principles underlie the recommendations:

First, it is realized that social insurance in itself will not meet the problems of maintaining employment.

Second, the plans are contributory. It is interesting to note that the employee's contributions would be increased to a rate higher than that of the employer while, under most present plans, the rates are about the same.

Third, all benefits are based on a minimum subsistence level.

Fourth, the individual has opportunity

CHEVROLET TRUCKS

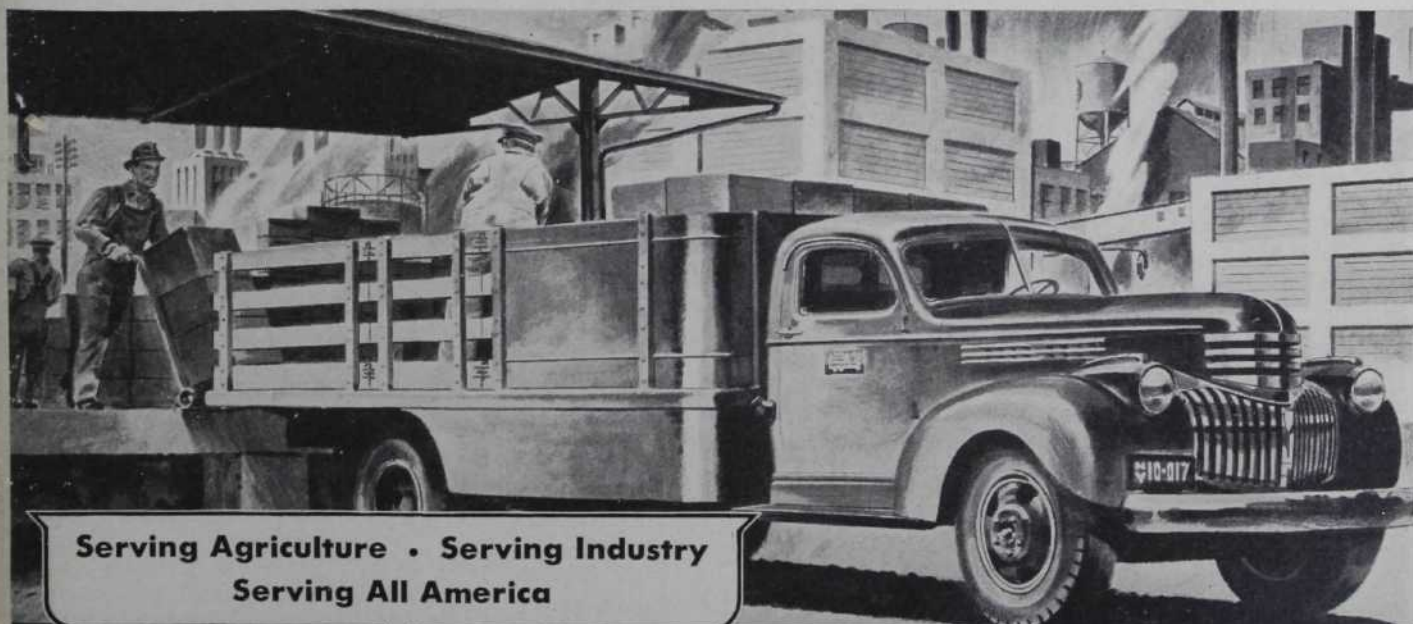
Vehicles of Victory

ON THE FIGHTING FRONTS—ABROAD



Chevrolet trucks—like much other Chevrolet-built equipment—are fighting side by side with our fighting men in all parts of the world.

ON THE WORKING FRONTS—AT HOME



Serving Agriculture • Serving Industry
Serving All America

War Carriers for the Nation

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT, MICHIGAN



and encouragement to provide for additional benefits.

Although these are all sound principles for any social insurance plan, it by no means follows that this country could adopt a plan which might be successful in England. For instance, in our present plans, the rates of contributions and benefits vary with wages paid while in England they are uniform. The wide range in *per-capita* income, wages and standards of living in this country make flat rates impractical.

Situation in U. S.

A UNIFIED plan which would be feasible for a small, compact country with a homogeneous population, as England, might not work out at all satisfactorily in a country the size of the United States, with these wide varieties in local conditions. The Beveridge report questions whether flat rates are altogether satisfactory in England.

In this country the states have played an important part in develop-

ing social insurance. Workers' compensation has always been handled on a state basis. The unemployment compensation plan and old age assistance are also administered by the states. On the other hand, the old age insurance plan, due to its nature, has been developed on a nation-wide basis.

In any extensions of social insurance, the respective functions of the state and the federal Government must be carefully studied. Furthermore, individual company plans for group life insurance, pensions and sickness benefits have been widely adopted here and are important factors in providing security for millions of workers.

Care must be taken not to interfere with these plans.

Officials of the Social Security Board and others have recently proposed that this country adopt one unified social insurance plan which would include and extend the two existing plans—old age insurance and unemployment compensation—and in addition would provide permanent dis-

ability, temporary disability benefits and hospitalization benefits. This plan would involve a cost of ten per cent of pay roll, compared with the present cost of five per cent. Since the details of these proposals have not yet been released, only the principles involved can now be discussed.

Old age insurance

THE federal old age insurance plan which was included in the Social Security Act of 1935 was radically changed in 1939 as the result of recommendations by a Federal Advisory Council. With these changes, the plan was put on a current-cost or pay-as-you-go basis, with provision for only a contingency reserve. The changes included provisions for additional pension allowances to retired men with wives over 65, for widows and children allowances, and changes in benefit formula. Students of social insurance generally agree that the principles of the present plan are sound.

It has been recommended that the plan should be extended to cover parts of the population now omitted, including employees of non-profit organizations; government workers, domestic servants; farm labor; and self-employed. Administrative problems connected with the first two groups are not difficult but for the last three they are. The Social Security Board has been working for some time on a stampbook system to supplement the present reporting system in covering some of these groups, and it would seem desirable to extend the plan at once to all these groups.

Late in 1942, Congress discussed the question whether the tax rates under the old age insurance plan—one per cent on employers and one per cent on employees—should be increased on January 1, 1943. In recent years benefits have been below normal, as many persons who would normally retire are continuing to work, and contributions have been above normal due to high employment. The reserve has increased faster than anticipated and, on November 30, 1942, was \$3,700,000,000.

Congress, following the principle of keeping the plan on a pay-as-you-go basis, postponed to January 1, 1944, the increase scheduled for January 1, 1943.

Those advocating an increase in the tax rates point out that the collection of additional taxes would serve as a check on the inflationary trend, provide the Treasury with money needed to finance the war, and that additional reserves should be accumulated. From the point of view of general policy it would seem unwise to have any increase made in the social insurance



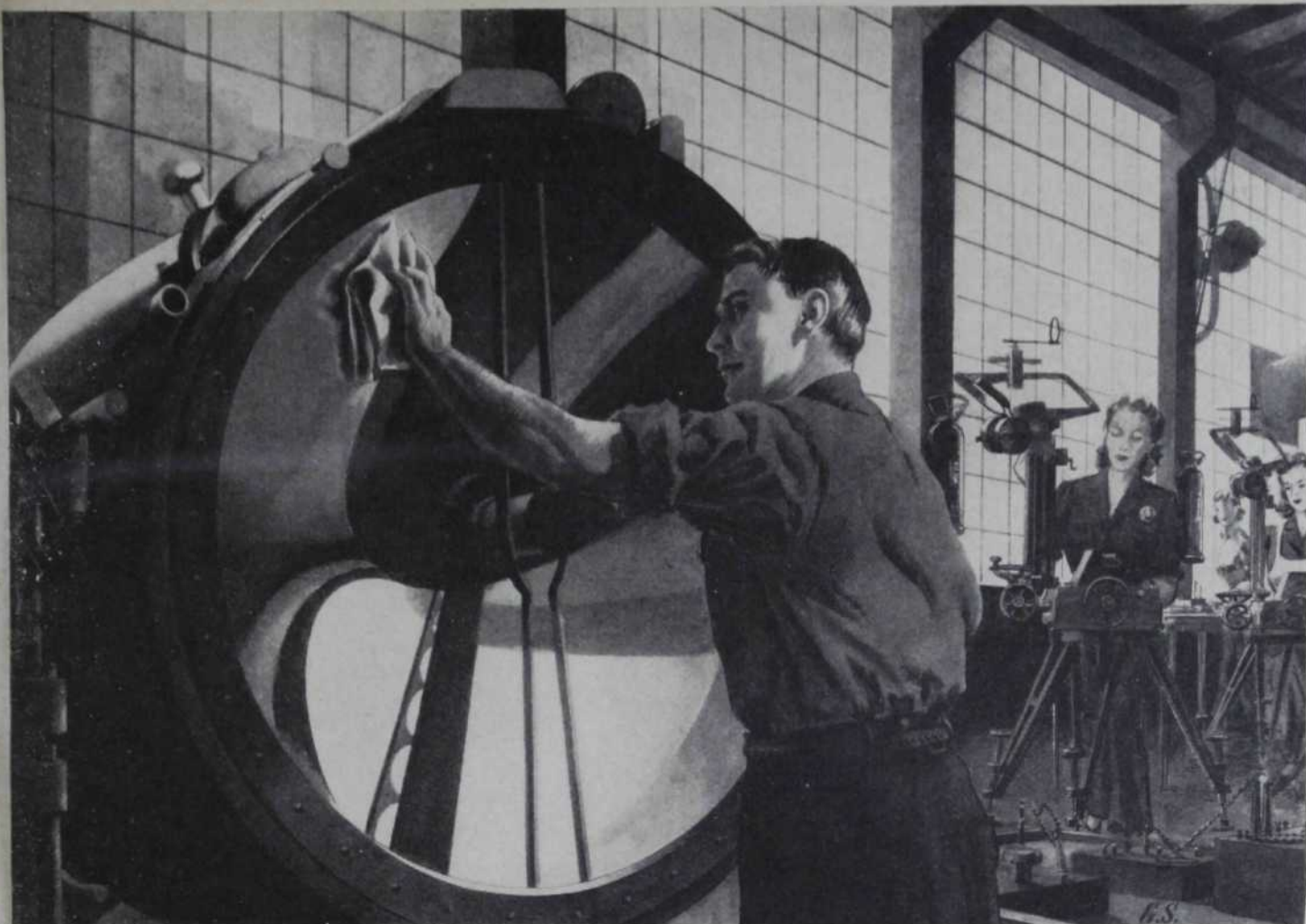
BELL RINGER



The Lady Makes Her Sacrifice

It has been well established that women will give up more foibles and so-called indispensables with better grace than men in war-time. But for a company boss to ask them to give up telephoning indicated more than the usual amount of nerve on the part of Goodyear's management for the average girl's telephonic affliction is no fable. So when lovely Ruth Harnack reported for duty there was the sign on the telephone receiver, "Is this call necessary? If so, be brief!" She didn't talk, neither did she quit. Every telephone in the plant was similarly labeled and phone calls were considerably reduced.





A Cloth that helps the Navy see

TO COMBAT fog and night and clouds... our navy requires the finest and most powerful of lenses for range-finders, searchlights, blinkers and binoculars. Lenses that require some of the most exacting work in the world. They must be ground and polished. Re-ground and re-polished... time and again. The lightest scratch can mean ruin.

Thus a simple thing like the cloth that workers use for polishing becomes of vital importance. Leading makers of optical instruments have long searched for a cloth which would be at once soft and absorbent, yet particularly free from lint.

Could American Viscose research laboratories devise a yarn and assist in developing a fabric that would meet such exacting specifications?

When the problem was presented to us, it so happened that we had just recently helped in the development of a special diaper fabric with our extra-strong rayon staple, "Avisco," combined with cotton. Repeated tests showed that besides being unusually soft and absorbent, this fabric was remarkably lint free... would prove ideal for lens polishing. Today this "Avisco" spun rayon and cotton cloth, developed for babies' diapers, is being used by leading optical instrument makers and U.S. Navy plants similarly engaged.

This is a case where research done in peace time is helping America in wartime. And after the war... when victory is won... "Avisco" and other products of American Viscose research will resume their job of enriching America's world of textiles.



AMERICAN VISCOSE CORPORATION

Producers of CROWN* Rayon Yarns and Staple Fibers

Sales Offices: 350 Fifth Avenue, New York City; Providence, R. I.; Charlotte, N. C.; Philadelphia, Pa.

★ BUY UNITED STATES WAR BONDS AND STAMPS ★

*Reg. U.S. Pat. Off.

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taxes which cannot be justified by the financial requirements of the plan itself.

Unemployment compensation

THE provisions of the state unemployment compensation laws vary as to duration, amount of benefits and other features. Due largely to the high level of employment resulting from war production, the reserves have accumulated more rapidly than anticipated and, for the entire country, totaled about \$3,600,000,000 last November 30. The adequacy of present funds cannot be judged, however, by current experience as the shift from war to civilian production may result in heavy drains, particularly in states where war industries have attracted a relatively large number of workers. It is well, therefore, to consider the financial aspects carefully before changing these plans.

It should be understood that the state unemployment compensation laws were intended to take care of fluctuations in employment in normal times and short periods of business unsettlement. They are not expected to provide benefits during long periods of unemployment.

It has been recommended that both the duration and amount of benefits be increased. In most states the duration is now between 16 and 20 weeks. The maximum weekly benefits vary from \$15 to \$20. Rather than increase the benefits for all workers, many students of the

subject feel that it is better to provide a basic benefit for the single men and make additional allowances for the wife and dependent children. Such a provision is included in the District of Columbia law and was recommended last year by the employers and public representatives of the New York State Unemployment Insurance Advisory Council. Under this provision, those most in need of larger benefits would receive them; it is a sound principle of social insurance and follows a similar change made in the old age insurance plan in 1938.

Any appreciable increase in duration or amount of benefits would involve additional contributions in practically all states. At present the employer pays the entire tax, with a maximum of three per cent. It would seem logical to finance increased benefits by employee contributions. It is generally agreed that the plan would be on a sounder basis if it were contributory. An addition of a one per cent employee contribution would, in most cases, provide for 20 weeks' duration and reasonable allowances for dependents.

This year would seem an ideal time to make these changes since employees are generally in position to pay.

The federal unemployment insurance tax applies only to employers with eight or more workers.

The system should be extended to cover employees of smaller concerns and also to some other groups, as in the case

of old age insurance. Here again, however, it would be necessary to have a stampbook system to supplement the present reporting method.

Federal vs state systems

THE Social Security Board now advocates that a national system under federal administration should replace the present federal-state system. This would simplify reporting, solve the problem of the worker transferring from one state to another, strengthen the system financially by pooling the funds.

On the other hand, state systems have certain advantages. The plans can be adapted to meet local conditions, there is a better check on administration and a greater interest in the system when handled on a local basis. State systems also provide good opportunity for experiments in new plans and are in accord with traditional American policy.

The logical step at this time seems to be to improve the state systems rather than make a complete change by abandoning them entirely.

Most difficulties in administration of state plans have been ironed out and federal and state authorities, by co-operation, should eliminate the rest. The chief concern now should be whether the reserve in each state is large enough to cover present benefits in a period of protracted unemployment. Individual states should therefore study the effects which a depression would have on their funds, and take necessary steps to put the plans on a sound basis. Plans for meeting the unemployment which might continue during a deep depression after the benefits under the state systems have been exhausted also need study. Perhaps a system of extended benefits could be developed, with both the federal and state governments meeting the cost.

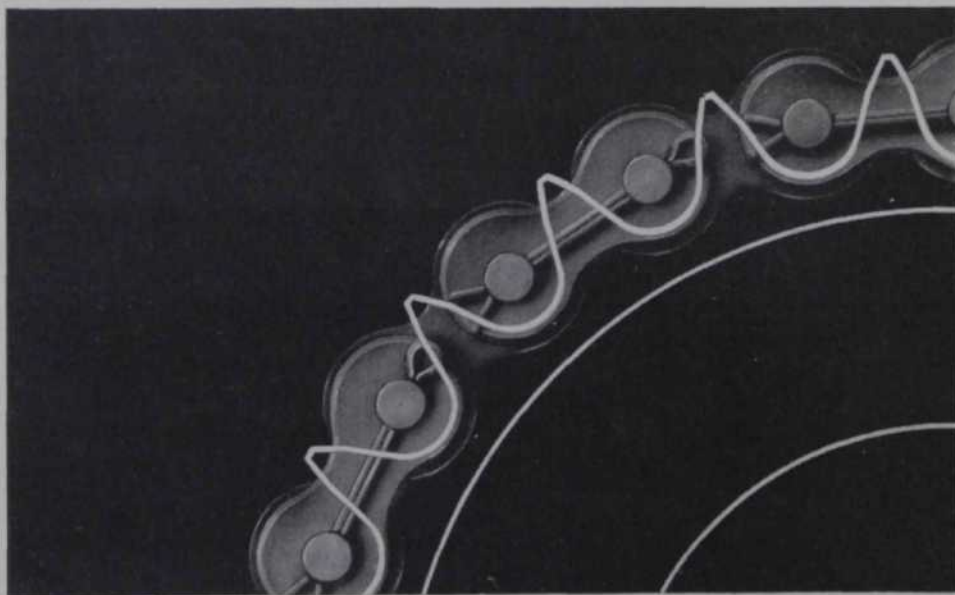
It is important that the states act immediately to put their plans in a sound position, taking advantage of the present high employment to accumulate adequate reserves to meet the possible heavy post-war drains.

Experience-rating

THIRTY-SIX of the state unemployment compensation systems have experience-rating provisions with lower rates for employers whose employment fluctuates little. Although there is evidence in several states that these plans have served as an incentive to stabilize employment, the war has made it difficult to demonstrate how much stability has been due to these plans and how much to war production. These are desirable provisions which the other 12 states should adopt to protect their employers against a competitive disadvantage after the war.

Sickness benefits

IT has been proposed that workers who lose employment through temporary disability should be paid the same cash benefits as are paid under the unemployment compensation laws. One state—Rhode Island—has recently introduced this plan, with the cost to be financed by the one per cent employee contribution



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Delivering power at practically 100% efficiency, every Morse Drive is a completely engineered power transmission unit so designed as to render unflinching service.

Meeting the challenge of war, Morse Drives are serving in tanks, planes,

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guns and ships ... and in the factories, on the machines producing them ... transmitting fractional h.p. in no-load timing devices, transmitting 5,000 h.p., and upwards, in steel mills.

Morse Drives will help you make important power savings, will help you speed production with their certain, positive action. Further, because Morse Drives are longer-lived, because they require a minimum of maintenance and service attention ... they'll save you money.

SILENT CHAINS

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FLEXIBLE COUPLINGS

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Don't believe a word he says—



THIS IS AN OPTIMIST. Bless him! Every business needs one. But don't believe a word he says when he starts waving away the uncertainties of the future in regard to replacing key men. For that's a tough job today . . . which is stumping many a concern.

We've got an answer that isn't perfect because we can't replace the man — but we can provide indemnification cash to cover the loss of key men by death . . . cash which will be payable to the company in amounts directly related to the key men's salaries.

1. Such an amount would finance interim adjustments of personnel, special expenses incurred . . . plus the increased salaries which are more than likely to result today.

2. With this type of Northwestern Mutual protection, the emergency acquisition of new men is financed at a surprisingly low cost. Our plan has a secondary advantage . . . it assures the accumulation of a special surplus through the cash value of the policies, if the men live.

3. *Don't forget* that the difference between insurance companies is significant. When buying life insurance, you may well save yourself hundreds of premium dollars, if you will do these two things: (1) listen carefully to the Northwestern Mutual agent's full story of a wonderful dividend record, and (2) check with any of our policyholders, for they can tell you, better than we can, *why no company excels Northwestern Mutual* in that happiest of all business relationships . . . old customers coming back for more.

1857



1943

The Northwestern Mutual

Life Insurance Company

MILWAUKEE, WISCONSIN

previously collected for unemployment compensation. Many individual employers already have plans for paying cash benefits to workers who are sick. Although the problems of administering a sick benefit plan are greater than those of an unemployment compensation plan, it would seem desirable that more states adopt these plans. They should be financed on a contributory basis.

It is important, in the case of sick benefits, that provision be made to continue the company plans already in existence. In many cases they provide more liberal benefits than would be necessary for a state plan.

Disability benefits

IT has also been proposed that the federal old age insurance plan provide benefits to those covered under it who become totally and permanently disabled.

A logical first step in insuring against this hazard would be to amend the old age insurance plan so that benefits could be paid to workers who become totally and permanently disabled after age 55 or 60. This would not be very expensive in the first few years and proper administrative machinery could be established. It could be extended later to lower ages if experience indicates that it can be properly administered.

Hospitalization insurance

ANOTHER proposal has been to include in an overall federal scheme hospitalization insurance or cash benefits to sick

persons while in hospitals. The benefits would be a flat amount—\$3 has been suggested—a day. Many new administration problems would enter into such a plan and there is a question as to whether a uniform benefit would be satisfactory for the whole country.

Voluntary hospital plans have developed rapidly in recent years. The latest estimates show about 15,000,000 persons covered. They have been satisfactory and are filling a worth while need. Would it not be better to encourage the more widespread adoption of these voluntary plans rather than to have the Government enter this new field at this time?

Medical care

DEFINITE plans for extending social insurance to include medical care are unlikely at this time. Experience in England and elsewhere has indicated that health insurance particularly should be locally administered as far as possible.

The logical development in this country would be to have some states experiment with medical care insurance plans. Perhaps in a few states doctors, business men, workers and state officials might work out together a contributory plan to provide medical care. Such a plan should permit operation of local community plans, individual employer plans and insurance company plans, and should provide as far as possible for local administration. This would not seem to be the time for federal legislation on medical care.

Too Good...



THAT'S Business! Customers multiply but there is little to sell, and few to sell it

BUSINESS is too good.

There's too much of it, in selling and service lines as well as in the war plants. They all face the same problems in handling it—shortages in manpower and materials.

Because war plants are taking the essentials, sales and service lines are struggling along with what's left. And finding business much too good in nearly all classifications.

These range all the way from laundries to liquors to office machinery. When distillers stopped making whisky October 8 they thought they had enough stored to last five years. But the demand has been skyrocketing. Now some distillers are said to be worrying about the possibility of selling themselves out of business.

The current combination of little manpower and much work would create a field day for the office machinery business—if that business had enough of these time and labor savers to sell.

New taxes, coupon banking, larger pay-rolls, social security deductions, renegotiations, and many other things have combined to create a terrific book-keeping job.

But production of bookkeeping's greatest aids—intricate and expensive office machines—has been cut this year to 30 per cent of 1941 output. This means a lot of ledger work will be done by hand, and hands are scarce.

Department store buyers are finding S. R. O. signs in New York markets. It's the men and materials problem again. It will affect nearly every department.

Substitutes—you'll hear them described as "alternates"—are being grabbed up as fast as they're found. The idea is to get something, or anything, to put on the counters after the first half of the year. By that time stocks on the shelves and in the warehouses will be gone.

Manufacturers are protecting their old customers by dealing with no one else. Buyers heretofore wined and dined by the trade on their New York trips are reaching for the check, hoping to increase their catches. They are ordering in double quantities, expecting half of it will reach their stores.

Shoe repairmen are working nights. Some report the sole leather they get is several grades below that they used a

Full Value— Immediately

That's why the most dependable and trouble-free asset a man leaves is his life insurance.

And usually, of all his possessions, this was the easiest for him to acquire.

May we assist you?



The Prudential
Insurance Company of America

Home Office, NEWARK, N. J.

year ago. The Army is taking top grade stuff. Repairmen also are finding machinery, needles, linen thread, harder to get.

There's talk of bakers, cleaners, launderers and dairymen cancelling house-to-house service because of the fuel, rubber and manpower shortages.

The cost of maintaining dwelling buildings has almost doubled. With rents frozen and costs climbing, landlords are letting things go in many cases. There's plenty of wallpaper, paint and varnishes, but few persons who will hang or brush it.

Transportation companies in the East where pleasure driving is banned have found the order has shifted the burden from private automobiles to public vehicles.

Fifty per cent increases in Sunday riders are common on street cars, busses, even railroads.

Railroads are calling out of retirement every piece of rolling stock that might carry anything. Even circus trains may be snatched up while the shows are in winter quarters.

Automobile manufacturers who were striving to keep their dealer organizations in business handling repairs and maintenance are worried about the pleasure driving prohibition. Service work kept many of them going last year. The 1943 volume might drop below the danger point if the pleasure driving ban sticks, or spreads.

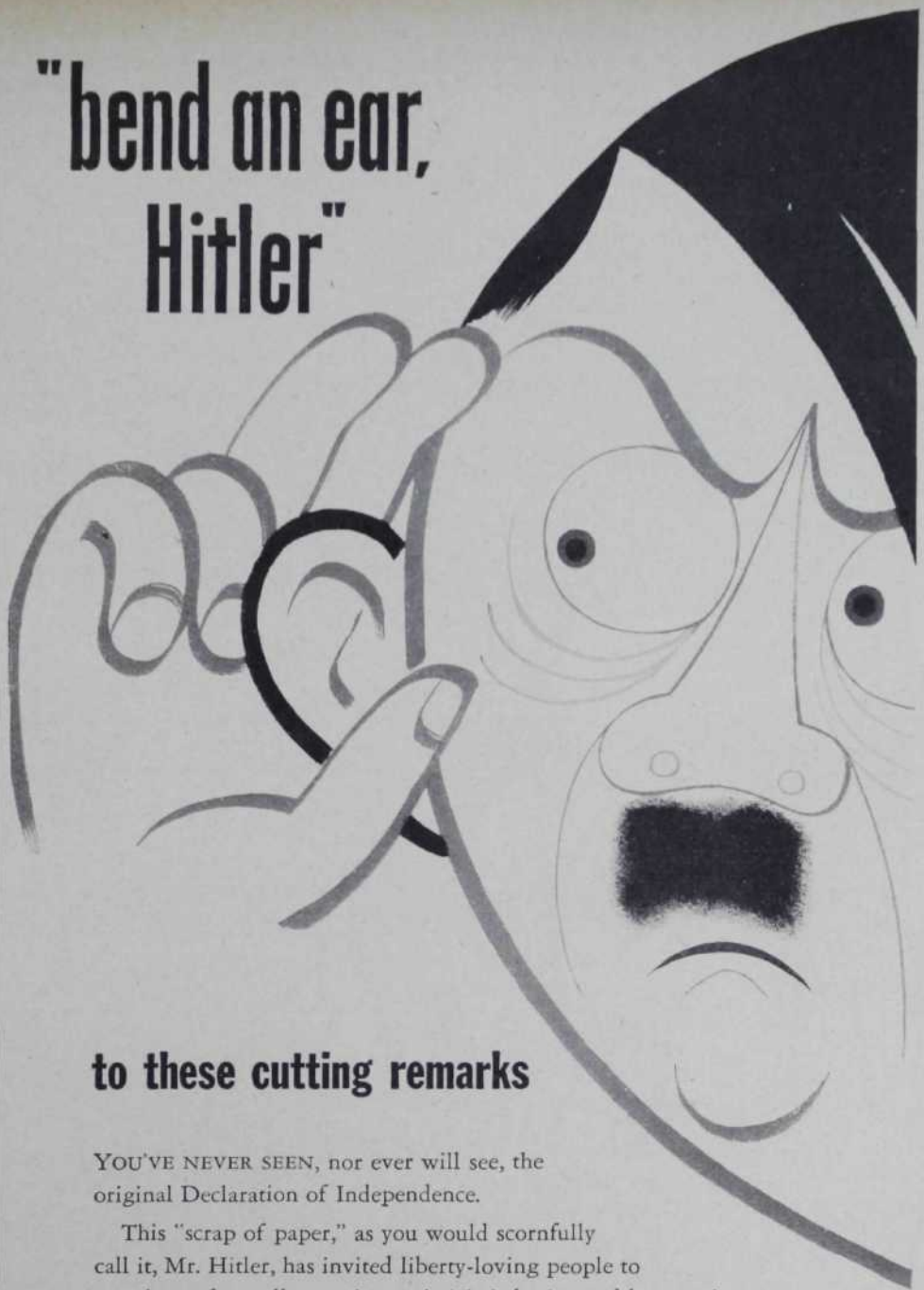
Even insane asylums and jails are going to feel the war's effect. Food rationing under which inmates of institutions will feel the same restrictions as those limiting diets in private homes are being outlined.

**"THIS year...
I'm giving double!"**



President Roosevelt has set March as the month when the American people are asked to support the 1943 Red Cross War Fund. This fund will be made up of pennies, dimes, dollars and larger contributions. But no matter what an individual's gift, there is the assurance that some portion goes for every Red Cross service.

"bend an ear, Hitler"



to these cutting remarks

YOU'VE NEVER SEEN, nor ever will see, the original Declaration of Independence.

This "scrap of paper," as you would scornfully call it, Mr. Hitler, has invited liberty-loving people to our shores from all over the earth. Their brains and brawn along with their hatred of tyranny is the power which will defeat you.

These determined men are working day and night in our huge armament plants, with the avowed purpose of cutting you down. To these men, the words written on that parchment are the inspiring force which will smother you under the weight of America's mighty production power.

And, Mr. Hitler, if you are inclined to think that these are pompous, idle words, *go into one of your trances*. Then, take a journey to the Detroit Tap & Tool Company's plant. Watch the precision-production of Detroit Taps and Tools that are helping cut threads to build weapons that will out-blitz you... all because of that hallowed Document in Washington.

BUY UNITED STATES WAR BONDS AND STAMPS

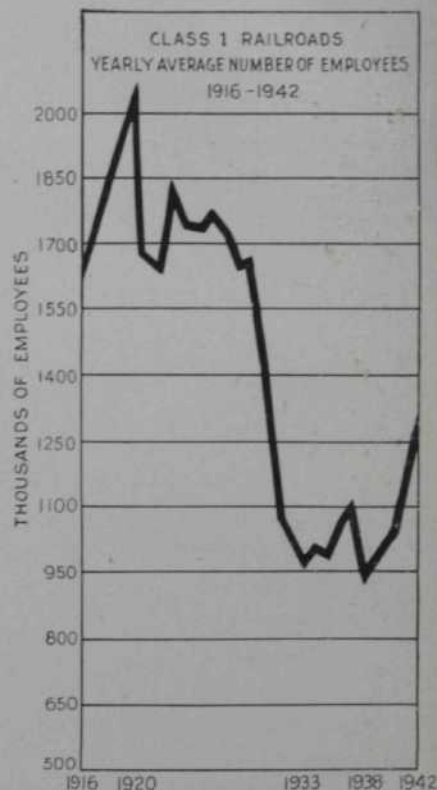
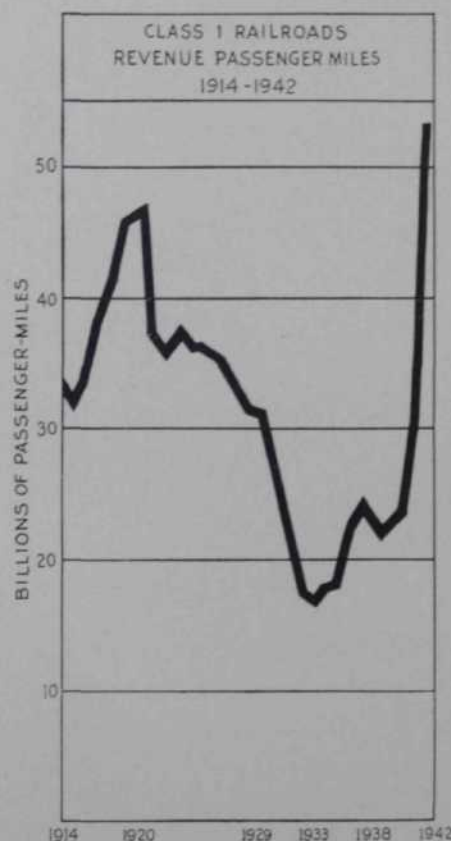
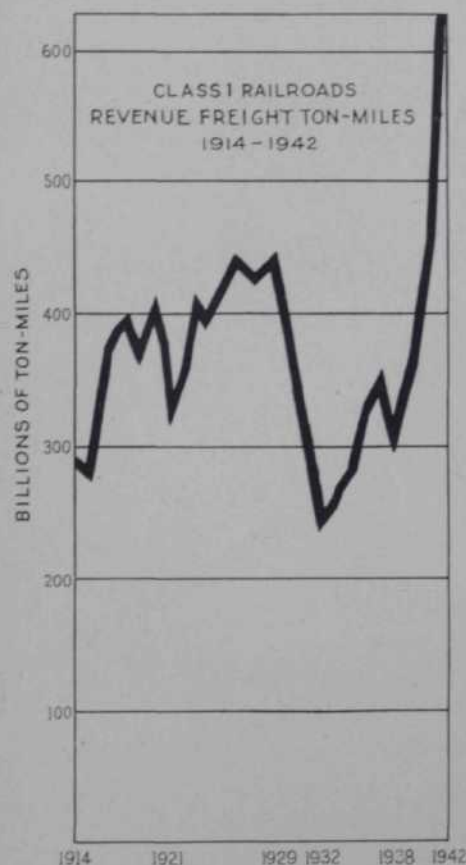
Detroit Tap & Tool Co.

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**GROUND TAPS • GROUND THREAD HOBS • THREAD GAGES
SPECIAL THREADING TOOLS AND GAGES**

Victory Rides the Rails—on Time!

Winning the war, at home and abroad, means winning the battle of transportation. The great part that America's railroads are playing in that battle was revealed late in February before the Interstate Commerce Commission in Washington, where the rail executives came to defend the railroads' rights to a rate increase granted more than a year ago by the I. C. C., but recently challenged by the O. P. A. Few people realize the tremendous tasks facing American railroads since Pearl Harbor—and before. A few facts give an idea of the problems: to move only one infantry division, 1,350 freight cars of all types are used and one armored division takes 75 trains of from 28 to 45 cars each. The charts below were designed to give in concise form a picture of a few of the recent crises that American railroads have faced—and overcome!



World War I was "small potatoes" to the railroads, compared to World War II's demands. About 55 per cent more freight moved by rail in 1942 than in 1918. Shown here are tonnages carried by Class I railroads by years, beginning with 1914. More freight rode the rails in 1942 than any year in history. A total of 630,000,000,000 ton-miles (tons multiplied by distance carried) was handled and moved by the railroads. This was 155,000,000,000 ton-miles, or 33 per cent more than the 1941 record; more freight than was hauled in the two-year periods of 1932-33 and 1938-39. The 1942 tonnage exceeded the boom year of '29 by more than 40 per cent.

Passenger business, once thought lost to rails, has returned. This chart, showing passenger movements for past years, reveals that Class I railroads transported 53,000,000,000 passenger-miles (passengers multiplied by distance traveled) last year—an all-time high. This was 6,000,000,000 more passenger miles, or 13 per cent, above the previous record of 1920. The increase shown over 1941 was a startling 80 per cent. Joseph Eastman, director of the O.D.T., recently estimated that railroads are now carrying in troop movements as many as 2,000,000 servicemen a month—and that this number increases constantly. Soldiers now take more than half of all Pullman berths.

Fewer persons, relatively, can now sing truly, "I've Been Working On The Railroad..." than in World War I. Although ton-miles and passenger-miles zoomed in 1942, the hiring schedules of Class I railroads did not. The line for employment trends since 1916 reveals that productivity per man has increased greatly on the railroads since World War I. The primary drop in employment came with the depression, but the recovery did not require a proportional increase in workers. Factors are the greater mechanization of maintenance forces, abandonment of much branch-line mileage and use of more efficient locomotives, both steam and Diesel.



more **V**ital than gold

All the gold buried at Fort Knox, Ky., is less important to Victory than the rich iron ore deposits of the Mesabi, Cuyuna and Vermilion Ranges of Northern Minnesota.

The Mesabi range alone contains the world's largest developed deposits, and much of this ore lies in open pits.

From these pits giant shovels scoop the vital "red dust" into Great Northern cars, which dump it a few hours later into docks in Duluth and Superior, at the Head of the Lakes. There ore boats are swiftly loaded for delivery to the nation's steel mills.

When the shipping season closed December 5, new mining records had been set on the Minnesota ranges, and Great Northern Railway handled nearly 29,000,000 long tons—a *third of the Lake Superior district's total production.*

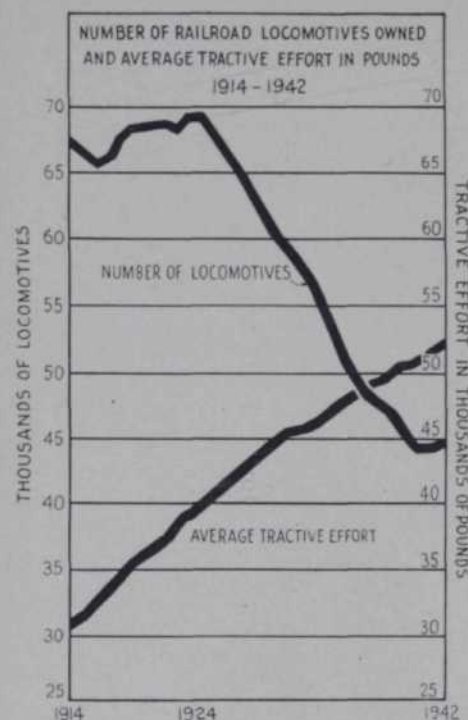
With the necessity of conserving equipment, Great Northern, between shipping seasons, is reconditioning motive power, cars, trackage, and its Allouez docks in Superior, making ready for a still bigger job in 1943.

The fabulous iron ore deposits in Minnesota are only part of the wealth contributed to America by the *Zone of Plenty*—and delivered by this vital artery of transportation.

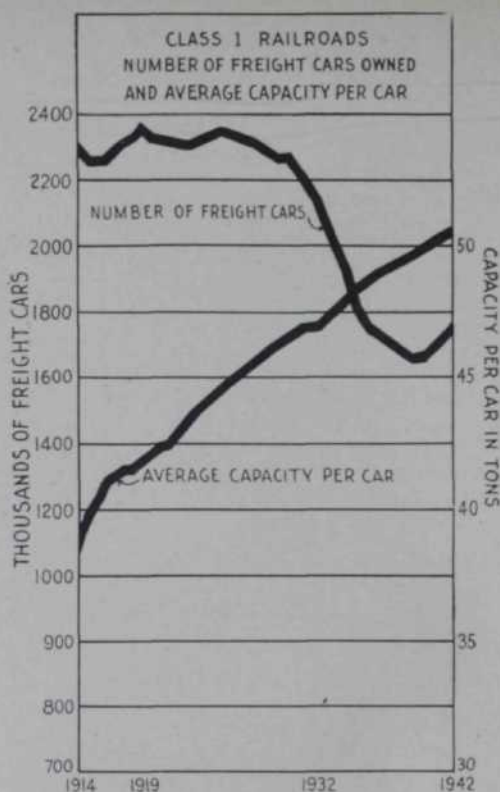
GREAT NORTHERN RAILWAY

ROUTE OF THE EMPIRE BUILDER — BETWEEN THE GREAT LAKES AND THE PACIFIC

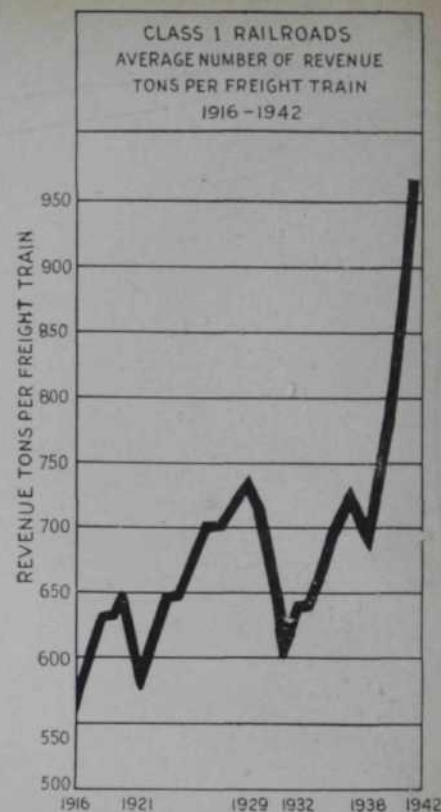




Railroads are doing a tremendous job with fewer (but bigger) locomotives. As this chart reveals, the high point in number of locomotives owned by Class I rail lines was in 1924, when 69,000 engines were in use. This fell rapidly to a low of 44,000 in 1940, increased moderately to 44,800 in 1942. Offsetting the decline in actual units, however, is the ascending line which represents the power, or tractive effort in pounds, inherent in locomotives. It is evident that iron horsepower per locomotive has been increasing steadily through the years. In addition, the modern locomotive spends less time in the shop.



Box-cars are carrying greater individual loads and working harder than ever. This chart shows the number of freight cars owned by railways in each year from 1914. The average rated capacity of freight cars has grown considerably. During the '30's, freight-cars were junked rapidly (and not replaced), but this trend was reversed in 1940, although the increase has been less than it would have been, under ordinary similar circumstances. The threat of equipment shortages was met by putting more in each car, speeding up trains and reducing the idle time of cars.



Trains are longer in World War II. Here is pictured the average number of revenue tons carried per train from 1916 through 1942. The record train load of 960 tons of revenue freight per train in 1942, it can be seen, is just an extension of a trend begun in 1932, when the railroads began to develop greater operating economies to meet depression and competition. Greater loads per car and greater tractive effort of locomotives make this increase possible. A train carrying 960 net tons of freight actually weighs 2,256 gross tons, excluding the locomotive and tender.

"Shopping Leave" Boosts Output

SHOPPING for "pointed" and unrationed foods—most of them in short supply—favors the early comers. By the time the British war-working housewife gets around to the shops, most are closed or the limited quantities are exhausted. To compete with the Woman at Home, the woman worker stayed away from work when she could be spared the least.

British war production plants had to do something about the problem—and they did. Some closed down Saturday mornings.

They found that production actually increased, because of the improved morale of both married women and men. The women discontinued their old habit of sneaking off in dribbles throughout the week.

Others, working on urgent government contracts seven days a week, arranged for food shopping orders to be filled at their plants. Female employees were urged to designate their preferences in food shops, the one having the most votes being chosen as a centralized source of supply. A variation of this plan was to rotate food stores for the first few weeks, to determine the one best equipped to handle group orders delivered to the plant.

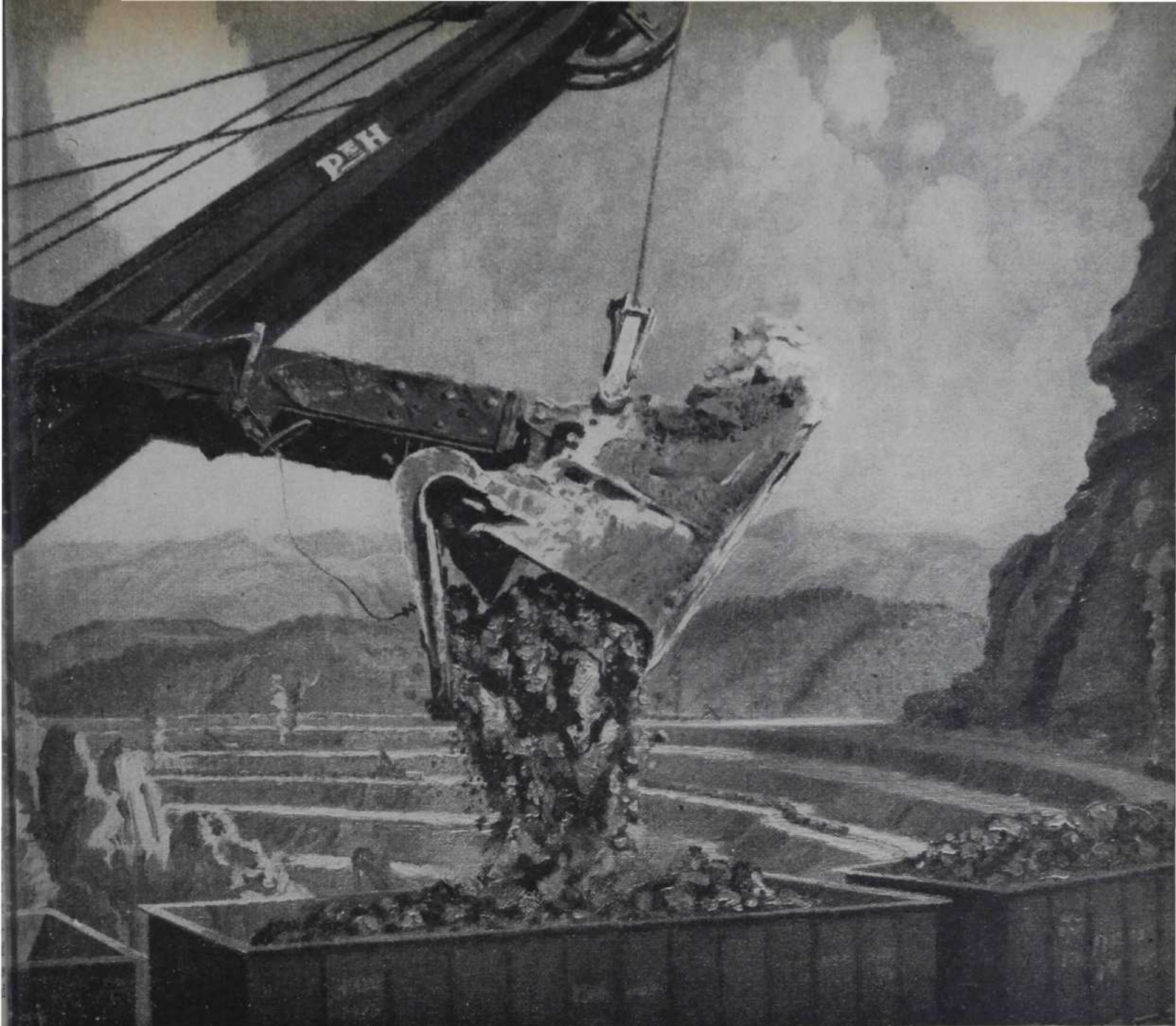
A personnel department representative collected the workers' orders and relayed them to the grocer each Monday or Tuesday. The grocer then had from three to four days to handle them. Shortly before the scheduled delivery time, the personnel representative collected money and coupons for the

"pointed" foods included in each order; checked the filled orders (each one separately packed) for possible errors, or for goods out of stock, or for substitute items.

Centralizing these readjustments saved much confusion.

The plan had a three-fold advantage: 1. The grocer could fill a good number of orders at his own convenience, thus giving him fewer customers to handle in person at rush periods. He reciprocated by including a fair quantity of the so-called "luxury" foods in the factory group of orders. 2. The woman war worker saved shopping time and effort. 3. The industrialist benefited by improved morale and the better health of his female force.

—ERNEST A. DENCH



MOVING A MOUNTAIN TO *FEED* A WAR

RIGHT NOW—*today*—American men and equipment are performing miracles. Even the task of moving mountains has become more fact than fancy.

In the huge open pits which hold the critical minerals we need for Victory, you'll hear the incessant hum of motors as big P&H Electric Shovels keep up their steady digging rhythm—wresting raw materials from the earth to

feed war's enormous appetite.

Dreams which began almost 60 years ago are today realities that are serving America in her time of need—in mining, in industry, in construction work of many kinds. They are the dreams that made P&H a leader in applying electrical power to the movement of heavy loads—to save human labor and help create a better world.



MILWAUKEE, WISCONSIN
Electric Cranes • Electric Hoists • Arc Welders
Excavators • Welding Electrodes



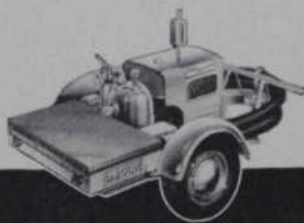
Fire Trucks CAN'T FLY

Poor roads, traffic, distance—any of these can prevent fire apparatus from reaching outlying locations in time to prevent serious fire losses. Your relatively isolated plant—far from city fire departments—runs that risk daily unless adequate fire fighting equipment is maintained right on your premises, immediately available.

LaBour Fire Trailers put plant protection on the soundest possible basis because they furnish their own power and can take water from any source. These easy-to-operate units are always ready for instant action—even inexperienced men can use the LaBour effectively.

All the facts concerning this low cost way to positive fire protection are in Bulletin No. 49. Write for your free copy today.

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Precision-ize Pencil Drawings
Sharp Prints without Inking
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Speed Production Time
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Make Old Boards Better Than New



Cover worn-out boards. Make new boards more efficient. Most perfect drawing surface yet conceived. In use in over 1000 plants. Costs very little. Write for details and trial offer on No-Ink Drawing Board Tops.

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TREASURY DEPT.

Volunteers:

PENALTIES aren't needed if the average citizen is convinced directives make sense

DO AMERICAN citizens realize they are in the midst of total war, although the battle fronts may seem far distant from their front lawn? Are they willing to make voluntary sacrifices at home to attain the ends the nation must reach to wage total war?

Some say yes. Some say no.

Evidence keeps piling up, however, that American citizens, informed of a need and given understandable directives, will come through.

Take war bonds and stamps, for example. In 1942, the American public voluntarily bought \$9,200,000,000 worth—without threats of fines or imprisonment. Almost 300,000 volunteer helpers sold those bonds, directed by an amazingly-small number of paid workers in Washington. Only 1,000 persons drawing pay help in the war bond drive, and the entire expense of administering the program in 1942 ran little more than \$10,000,000.

This record is so outstanding that Rep. Louis L. Ludlow recently called the war bond drive the "most economical money-raising campaign in history." He estimated that administrative costs in the program run less than one-tenth of one per cent—far lower than the administrative cost of collecting income taxes.

Since war bonds and stamps went on sale in May, 1941, redemptions by the public have averaged less than 2.22 per cent of the total sales. Treasury experts compare this figure with the average redemption of 4.14 per cent on the old "baby bonds" sold before the war. It is evident, they say, that people think twice before cashing in war bonds.

Another outstanding example of voluntary action came during the Christmas season, when people were asked to cut down railroad travel to a minimum.

"This was a most highly effective appeal and met with remarkable response from the traveling public," said an official of the Association of American Railroads. "In some spots, the public was almost too cooperative. There were instances of trains that could have handled more traffic."

The Richmond, Fredericksburg & Potomac Railroad Company reported to the O.D.T. that, while its average pas-

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BELGIAN HORSES

for City Delivery—
Save Rubber, Gas and Steel
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Their great pulling power, easy-keeping qualities, gentle disposition and attractive color make Belgians especially desirable for short-haul delivery in our cities. Our Belgian breeders have good horses for sale at reasonable prices.

Meet the restrictions on gasoline and tires by delivering with Belgians.

For the illustrated 1943 Belgian Revue, the Illustrated Belgian Booklet, list of members and other information, write to

Belgian Draft Horse Corp. of America
H. J. Brant, Secretary, Dept. N, Wabash, Indiana

senger increase in 1942 was 54 per cent for civilians, the increase was only 20 per cent in the two weeks' period beginning Dec. 22, when normally the increase in travel is greatest.

"This public response made it possible to move over our railroad more than 105,000 men on furlough in this holiday period, an increase of 180 per cent above the number carried in the same period in '41," John B. Mordecai, traffic manager, pointed out.

Along the same line, the telephone companies of America report an "amazing" response to their appeals for people to remember that "the war is on the wires" and to cut down on long distance calls, except in real necessity.

"Considering the huge increase in national income, the millions of men away in camps, the need for increased business calls and other factors, we feel that it is a real tribute to the intelligence and cooperative spirit of the public that telephone use has not increased far beyond its present fast clip," one official said.

"It is difficult to estimate how great the response has been, since no one knows how great the use of telephones might have been but, judging by what could have been expected normally, the response has been grand."

Smaller number, please

WHEN the Chesapeake & Potomac Telephone Company in Washington, D. C., distributed its 1943 directories recently it asked everyone who had been using more than one directory voluntarily to reduce the number asked this year. The response was unparalleled; 46,157 fewer directories, representing 240,000 pounds of paper, were used in 1943 than in 1942, despite the tremendous increase in telephones in Washington.

Even O. P. A. officials who have been most free with threats of fines or jail for violators of its directives, expressed surprise that there was no run on canned goods, when it was announced that these would be rationed soon.

To students of the American scene these evidences of voluntary public cooperation with Government programs is no surprise. They point out that a long history of "going over the top" in financial drives for charitable and social welfare drives; for collecting scrap; for saving grease; for organizing needed committees by public non-Government agencies lies behind these few examples.

The men who study such matters as public psychology and responses say the principal trouble with many Government programs is that they have not taken into account the public's basic willingness to do everything sensible required to win the war.

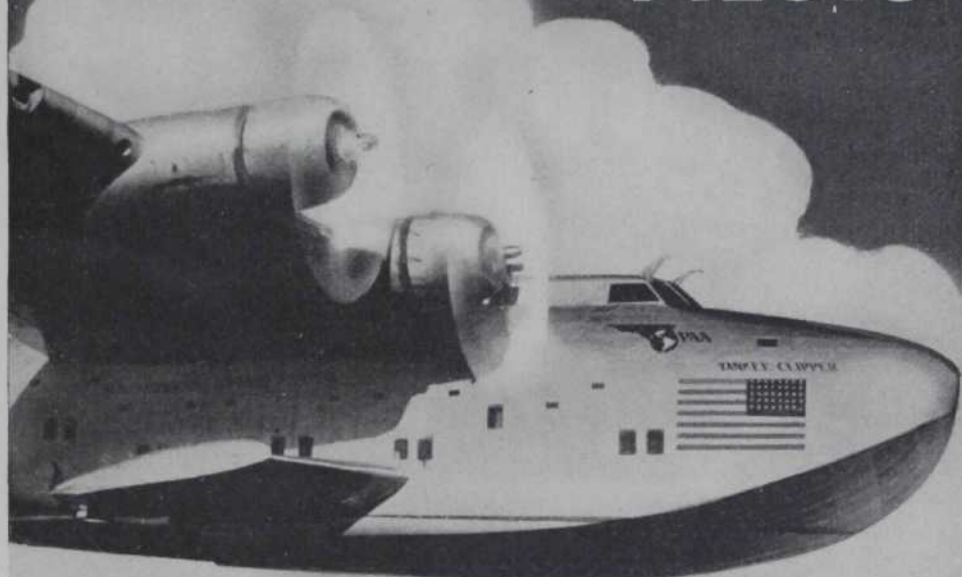
"Three things are needed to get public support for any sensible war-time program," these men say:

"One: The people must be given the truth, without trimmings, concerning the necessity of the contemplated action.

"Two: They must be given easily-understood, sensible directives as to how to cooperate.

"Three: They must be convinced that the need is real and that the method is the best that can be devised."

Training the CLIPPER PILOTS



with
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Long before the day when he took the controls of this huge skyliner, the Clipper Pilot served an apprenticeship exacting in the extreme—an apprenticeship of countless hours aloft, under every conceivable condition, flying mostly "on instruments".

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Pan American Airways Clipper Pilots—like our Army Bomber Pilots—are schooled in twin-engine Trainers powered by JACOBS.



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POTTSTOWN • PENNSYLVANIA • U.S.A.



The Milk Pail is too Small

(Continued from page 28)

ing for actual combat, but there is no reason why those who will never be sent overseas should have more milk and butter than civilians. The Army would probably respond that such division of quartermaster stores is impossible.

Despite these forebodings, let no one conclude that there will be a serious bottled milk shortage. First, the domestic demand will probably level off shortly. Workers are not likely to spend more money than at present on milk. Second, the price structure is so arranged that beverage milk will always bring a higher price than milk used for other products. Consequently farmers will always set their sights on beverage milk.

Unless the Government wrecks this structure in an effort to get more milk for butter, cheese or powdered milk, there should be enough for drinking. But it seems unlikely that we can have enough butter, cheese, canned milk, cream, ice cream and milk. The Government must choose and it would be more politically dangerous to run short of milk than of butter.

Beverage sets the price

HERE, briefly, is how the system works. A farmer delivers milk in Deposit, N. Y., but has no idea what it will be used for. It may go to New York City for bottled use. Another farmer in Lisbon delivers milk that will probably be used for cheese because there is a cheese factory there. Neither farmer knows how much he is going to get until he receives his monthly check. That depends on how all milk delivered in the New York milkshed is used. Every distributor and processor reports the percentage of milk used for beverage, butter, ice cream, cheese, to the Market Administrator.

Each month the percentage varies. In low production months like November, something like 60 per cent of all New York milk is used for beverage. In a high production month like June, only 40 per cent may be used. The beverage milk always brings the highest price, say \$3.30 a hundred pounds. Of the eight or ten other classifications, each gets a separate price with the scale running down to perhaps \$1.78, which as a rule, would be the price paid for milk going into butter.

When the market Administrator has received all the reports he makes out a check to each producer based on the total percentages. If 60 per cent of all milk sold was for beverage purposes, the producer will get the fluid milk price or \$3.80 a cwt. for 60 per cent of his output. If four per cent was used for butter, he will get \$1.78 for that portion. Between these two prices he would receive varying amounts according to the total percentage of milk used in each classification. The blend price might be \$2.90 and the farmer would be paid \$2.90 a cwt. for every pound delivered.

If the two farmers delivering milk in Deposit and Lisbon sold the same quan-

tity of milk, they would receive identical checks even though their milk was used for different purposes.

The system is complex and full of variations—complicated by trade barriers between different milksheds. But by and large, both distributors and producers like it. It has served to stabilize the industry and was a farm life-saver during the depression.

However, this complex system muddles the butter situation. It takes 10½ quarts of milk for a pound of butter. The Government could create more butter by diverting more fluid milk to creameries. But, if a serious shortage in bottled milk developed, the Government would be stepping into the lion's mouth. Congressmen would receive bales of pictures of so-called milk-starved babies. Furthermore nutritionists know that we can get along better without butter than most any other dairy product—it contains only fat and vitamins—no calcium and other vital elements of whole milk products. The fats and vitamins can also be obtained from other foods. But butter is also a symbol of the better life. Butterless days would symbolize the day of doom to some Americans.

About 50 per cent of all the butter in this country is processed in four Mid-West states. But the price farmers get for it is still determined by the price of fluid milk. Milk production in this area is so high that there is a big surplus. It can't be shipped out in great quantities as fluid milk because that would upset the dairy industry in other states.

Butter is the stabilizer of the dairy industry—it's the storage vat for surpluses. If demand for other milk products is high, less milk is used for butter. Last year's butter production was less than in 1941 for that reason. But, because of the marketing agreements, there is no way to pay more for butter without raising the price for fluid milk.

Therefore, the way to get more butter is to pay more for fluid milk so that there will be more available for all dairy products. Switching some of the money used to pay farmers for not growing crops over to pay them for what is wanted, notably milk, might help. If farmers got a bonus for increasing milk production, many of them would find a way to do it—perhaps at the expense of other crops—but what is needed more than dairy products?

As the situation stands, now, civilians will be lucky if they get one pound of butter per person per month this year. Men in the armed forces are scheduled to get 40 pounds a year. Persons in good income brackets normally consume about 22 pounds a year.

The dairy industry is somewhat worried about this for fear margarine will become a widely accepted substitute. That would lead to disruption of the entire milk industry in peace-time. Farmers would then kill cows and when milk production fell off in the winter there would not be enough for bottled milk distribution.

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Send me new, illustrated, fact-full booklet: "How to Cut
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LET FREEDOM RING!

HIGH ABOVE the roar and rumble of America's factories at work for war, you hear the bells of freedom ringing on tens of thousands of rushing railway locomotives.

Those bells dramatically symbolize the strength and resourcefulness and determined will of this land of free men to whom freedom of initiative and freedom of opportunity have never been denied.

America's railroads, planned by free men, financed and operated by free men, managed by men with a strict sense of responsibility towards those who patronize them and to-

wards their government, have done more perhaps than any other one activity to make this a nation united and indivisible.

One truly representative American railroad is the far-flung, 11,000-mile Milwaukee Road—with bands of shining steel linking the industrial ports of the Great Lakes to the world ports of the Pacific North Coast. This railroad is proud of the productive region it serves and proud to be a part of America's free railroad system.

Untrammelled transportation facilities are vital to victory! LET FREEDOM RING!



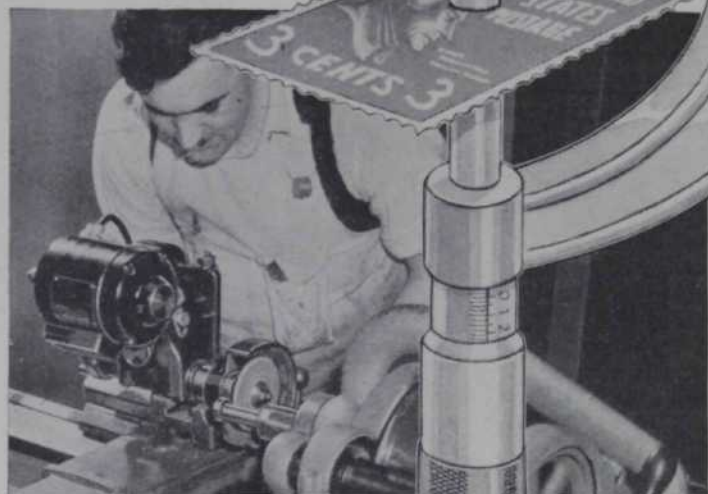
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How thick is a postage stamp



A postage stamp is 44 times as thick as the measure of Dumore accuracy . . . 1/10,000 of an inch. That is the precision made available to modern industry by Dumore Grinders—time and cost-saving tools that can be easily and quickly mounted on lathes, planers, shapers and other machine tools. Dumore Grinders are not only increasing the efficiency and usefulness of existing machinery—they are multiplying the productive capacity of workers everywhere.

Dumore Grinders are demonstrated, sold and serviced exclusively by mill supply distributors.

THE DUMORE CO., Dept. 503-C, Racine, Wis.

A Dumore No. 5 Grinder, with thread grinding attachment, cutting threads in half the time formerly required.



Dumore
PRECISION
GRINDERS

Print Shop At War

THE WORLD'S largest printing buyer recently called up the Public Printer, manager of the world's largest printing plant:

"I'm sending over an order for 792,817,000 pieces of printing, ranging from one to 102 pages—and I want it in three weeks," he said. "Can I get it?"

"Sure, why not?" replied the printer.

This represented the greatest job-printing order ever placed for a similar short period. If the average job-printer could feed a press at a rate of 20,000 impressions a day, it would take him more than 600 years to fill it. Yet the order was ready on time.

While it is stretching a point to compare job-printing with newspaper publishing, the immensity of this job can be grasped easily when it's considered that *The Chicago Tribune*, with a circulation of more than 1,000,000 copies a day, prints approximately 25,000,000 newspapers in three weeks, counting the extra Sunday circulation, and newspapers are printed on special high-speed presses. Job-printing entails a hundred-and-one time-killers not met in newspaper printing.

Just another job

O. P. A., placed that order with John J. Deviny, deputy public printer and acting Public Printer in the absence from Washington of Augustus E. Giegengack, head of G.P.O.

It wasn't the only order the Public Printer received that day. As usual, it was one of 300 separate "jobs" that are placed every day in the United States Government Printing Office, sent by any of hundreds of Government departments that place their printing in the family—by law.

One of those jobs might be a request from the White House for 16 engraved invitations to a Presidential dinner; another might be for 16,000,000 questionnaires.

It's immaterial to the Public Printer. He has 8,000 employees (three times as many as any comparable job-shop in the nation), the most modern equipment, in a plant that has no parallel. It stays open 24 hours daily, seven days a week, and behind it stand thousands of printing shops that will help in any emergency. Every printing plant in the nation is catalogued as to equipment and "know-how" and any one of them can be put to work for Uncle Sam at a day's notice.

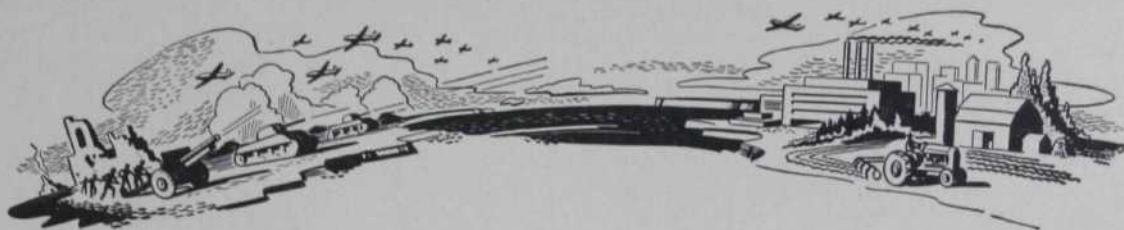
As a matter of fact, so great is the demand on Uncle Sam's own print shop that 75 per cent of that "biggest order" was sublet. But, even then, the Public Printer had to see that it was done—and done right.

Pearl Harbor did not catch Uncle Sam's print shop napping. It has been through three wars and officials knew what was coming. They went on the day-and-night basis, excluded visitors for the duration, and made plans to go with far less sleep.

The U. S. Government Printing Office



**BUY
UNITED
STATES
WAR
BONDS
AND
STAMPS**



FIRE INSURANCE IN THE WAR

As the guns of our fighting men blaze on the battle fronts from Africa to the South Seas, fire insurance continues to play a vital role on the home front.

Months before our entrance into the war, the "industry which protects other industries" had quietly and effectively thrown its inspection and engineering facilities into the task of helping to safeguard the industrial plants of the nation from sabotage and carelessness. Losses in manpower and essential materials which would have been equivalent to serious military reverses have thus been prevented; substantial savings to taxpayers likewise effected.

Further, the agents and brokers of the fire insurance industry are bulwarks of strength on the civilian front. Without thought of profit to themselves, agents, brokers and companies alike have shown, in handling millions of dollars of War Damage insurance, how an essential industry can be mobilized effectively to carry on a vital war function in cooperation with the government.

Moreover, insurance in all its phases is being maintained in our national life, thus strengthening civilian morale on a vital home front and permitting greater concentration on the war effort. Insurance dollars are going into U. S. Treasury Victory Loan Bonds and the securities of war industries, thus helping to buy guns, planes, tanks, ships.

Finally, we take deep pride in stating that 35% of the male employees of The Home Insurance Company are now with the armed forces.

☆ ☆ ☆

We submit herewith our annual statement. This year the figures are especially important, for they reflect a year of insurance in war time. Behind the dollars and cents lies a human story of even greater significance.

[Signature]
President

STATEMENT

December 31, 1942

ADMITTED ASSETS

Cash on Hand or in Banks and Trust Companies	\$ 20,215,068.12
United States Government Bonds	12,378,338.50
All Other Bonds and Stocks	71,248,522.76
First Mortgage Loans	383,779.32
Real Estate	3,879,315.95
Agents' Balances, less than 90 days due.	7,666,305.78
Reinsurance Recoverable on Paid Losses	1,076,289.00
Other Admitted Assets	135,861.61
Total Admitted Assets.	\$116,983,481.04

LIABILITIES

Reserve for Unearned Premiums	\$ 49,707,620.00
Reserve for Losses	11,017,422.00
Reserve for Taxes	4,521,522.00
Reserve for Miscellaneous Accounts	813,505.75
Funds Held under Reinsurance Treaties	59,045.61
Total Liabilities Except Capital. \$	66,119,115.36
Capital	15,000,000.00
Surplus	35,864,365.68
Surplus as Regards Policyholders	50,864,365.68
Total	\$116,983,481.04

Note: Bonds carried at \$3,447,281.00 amortized value and cash \$50,000.00 in the above statement are deposited as required by law. All securities have been valued in accordance with the requirements of the National Association of Insurance Commissioners. On the basis of actual December 31st market values, total Admitted Assets would be increased to \$120,423,617.78 and Surplus to Policyholders would be increased to \$54,304,502.42.

DIRECTORS

LEWIS L. CLARKE	WILLIAM S. GRAY	CHARLES C. MEYER,
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EDWIN A. BAYLES	GORDON S. RENTSCHLER	
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FIRE • AUTOMOBILE • MARINE INSURANCE

THE HOME, THROUGH ITS AGENTS AND BROKERS, IS AMERICA'S LEADING INSURANCE PROTECTOR OF AMERICAN HOMES AND THE HOMES OF AMERICAN INDUSTRY

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"Costs
LESS
to manufacture
in the **WEST?**"

"Yes, Mr. President! In the West we have our own sources of raw materials, we make our own goods, for our own markets. Distribution costs less, saves days of time over shipping from the East.

"In many lines we're already independent of the East. When peace comes we'll be even more so. We're developing ten years in one during this war period.

"Already more than 150 nationally-known manufacturers realize the economies of decentralizing production by putting a plant in the Metropolitan Oakland Area. It's the logical way to cut manufacturing and distribution costs."

1,750,000 PROGRESSIVE AMERICANS live within 50 miles of Metropolitan Oakland Area...most favorable location for reaching the Coast's 9,750,000 and the Eleven Western States' 14,000,000...three transcontinental railroads, two transcontinental airlines...harbor facilities unexcelled on the Coast...huge potential of postwar power and skilled labor...

These merely suggest some of Metropolitan Oakland Area's advantages. Prepare NOW for postwar expansion. Ask us to prepare a *Special Survey* showing how these advantages apply directly to your western operation.

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cut its teeth on war. It opened officially on the day Lincoln took office—March 4, 1861, and turned out \$700,000 worth of printing in first year of the Civil War. But this is small potatoes compared to the \$46,690,343.90 worth of printing turned out in the fiscal year ended June 30, 1942. It's doing much better this year.

Listed under "Miscellaneous Agencies" in a Washington directory, the Government Printing Office has no salesmen, no press agents (by any fancy title), never spends a dime advertising itself, operates under the same "paper rationing" restrictions as private printers, and is supervised by a board of directors composed of three members each from the Senate and the House of Representatives, who make up the Joint Committee on Printing.

Mr. Giegengack is the thirteenth Public Printer. The first was an enterprising fellow named John D. DeFrees, who used to sell printing to the Government from his little shop across the park from the Capitol and then was "bought out" by Congress and hired as first Public Printer, with 350 employees. The present buildings of the print offices, huge affairs, are on the site of his original shop.

Bigger jobs to come

STATISTICS tell the war-job Uncle Sam's print shop is doing:

War Ration Book No. 2—150,000,000 copies has 192 stamps in each book. This totals 28,800,000,000 stamps, according to the O. P. A., which promises the next book will be "much larger."

In 1942, the Public Printer had to deliver only 65,000,000 income tax forms. This year, he'll have to have 90,000,000 on the line by March 1.

The print shop last year assimilated more than 3,000 carloads of materials and supplies, including some 60,000 tons of paper.

It ships more than 280 carloads of postcards alone each year.

The taxpayer, for good or evil, gets caught many ways in this mass of printing. He must pay for it in taxes; he must read it; he must fill out the forms; he must pay the thousands of government employees engaged in gathering and tabulating the information on these forms; he must pay to mail them, and he must pay the rent on the floor space used in filing the forms, since most of them go back to Washington.

A goodly number of each form is printed with the knowledge that they will be wasted, either by inefficiency of distribution or by citizens who fill them out. That's why, when they want a form for every person, Government officials order 150,000,000 instead of 132,000,000.

There is only one place in Washington—or the nation—where figures mean so little. That's over at the Bureau of Engraving and Printing of the Treasury Department, which is not connected with the U. S. Government Printing Office. That is the place where all currency, postage stamps and war bonds are printed.

"We never could catch up with those fellows on money," one official laughed.

Can anybody?



If changes in your production program have resulted in idleness or partial retirement for certain of your machinery—**SELL** these machine tools to other plants engaged in war work, where they can "do a job" in the front lines of production for Victory.

Aside from patriotic motives, sound business judgment dictates that this equipment be turned into cash in the present favorable market. The 1942 Tax Act is favorable to this program:

Capital gains are subject to very limited tax; capital losses (for the first time) may be fully charged against operating profits.

At your disposal now are our 25 years experience in marketing surplus machinery, industrial plants and complete operating units. We invite a confidential discussion of your position.

ASSET REALIZATION CO.
Under Personal Direction of **HERBERT I. SEGAL**

21 EAST 40TH ST.

NEW YORK, N. Y.



JOHNS-MANVILLE AT WAR

A report to the public for the year 1942

★

THE WORLD now knows the job that was done in 1942 by American industry in producing the weapons with which we are fighting to Victory.

One of the greatest miscalculations of the Axis leaders was their estimate of the productive potential of that dynamic force we call American Business. They did not understand how readily the skills and abilities of workers and management, developed under freedom and democracy, could be converted to making weapons of war.

How American Business operates—how it has grown to be our great bulwark of strength through the fair reward for work and initiative, and the constant investment of new capital in new ideas and new machinery—is best reflected in the annual reports of the thousands of companies which comprise it.

For this reason, Johns-Manville—as a typical American company—is reporting this year not only to its stockholders and employees but also to the public, the highlights of our first full year of wartime operations:

★

Total Income	\$108½ million	100%
Used for all costs of doing business (except those shown below), including depreciation, depletion and reserves for war contingencies	\$ 49½ million	46%
To employees for salaries and wages	\$ 37 million	34%
To government for taxes	\$ 16½ million	15%
To stockholders in dividends	\$ 2 million	2%
Leaving in the business	\$ 3½ million	3%

★

★ In 1942 Johns-Manville produced the largest volume in its 85-year history. Measured in sales, production was 75% greater than in 1940, and 16% greater than a year ago.

★ Wages and salaries were 23% greater than in 1941. Employees numbered 15,200—slightly less than the year before.

★ Taxes were equivalent to \$19.65 per share of the common stock or over \$1,098 per employee.

★ Earnings after taxes were 5¢ per dollar of total income, compared to 6¢ last year.

★ Dividends of \$7.00 per share were paid on the preferred stock, and \$2.25 per share on the common stock.

★ The first shell and bomb-loading plant to receive the Army-Navy "E" Award was built and is being operated under Johns-Manville management.

★ Over 2700 J-M men are in the armed forces of the United Nations.

★ More than a thousand products manufactured by Johns-Manville are now serving our armed forces and our war industries.

Johns-Manville is now at peak operations with all of our energies focused upon record war production until final Victory. When the war is won, we pledge to the public that again we will produce more and better things for the kind of better living for which our country is fighting.

Lewis H. Brown
PRESIDENT, JOHNS-MANVILLE CORPORATION

These are a few of the products coming off the Johns-Manville production lines: Insulations for ships, steel mills, synthetic rubber plants and other vital war industries; packings, gaskets, brake linings for war machines; building products for war construction; Celite products for camouflage paints; asbestos fiber; bombs and shells.

Those desiring more complete information should refer to a booklet containing the formal Annual Report to Stockholders which we will be glad to furnish on request. Address, Johns-Manville Corporation, 22 East 40th Street, New York City.

We Tour the HOME FRONT

At Portsmouth, Va., 5,000 homes were built in 134 working days, by the Homsote Co. At Vallejo, 977 homes in 49 days; 500 in 49 days at Ft. Leonard Wood. The same company can build a large single house costing \$40,000 in 30 to 40 days; a small house for \$3,000 in six days; the Portsmouth houses were built at rate of one every ten minutes.

How beets have contributed to relief of sugar shortage is shown by a two-months delivery record of more sugar than the total amount of imported cane sugar for same period.

The first pre-stressed concrete tanks ever used for fuel storage and new type construction for seaplane ramps helped win "E" award for nine Austin Co. construction jobs in Northwest. Ramps which used beams and slabs of pre-cast concrete eliminated costly cofferdams and tons of steel.

Half of the 3,100 employees of the Security-First National Bank, Los Angeles, are now women.

A 100 per cent effective method for starting airplane engines in sub-zero weather has been perfected by United Aircraft Corp. division at Hartford. Apparatus is wheeled up to plane—no change in engine equipment needed. Hitler would have loved it in Russia. Same company has also perfected counter-rotating propeller or two propellers on one shaft—one turns clockwise, the other counter-clockwise. Removes twisting effect of single propeller.

A new cap, mostly paper, makes possible a complete vacuum packed coffee container that requires no steel, tin or rubber. Devised by Owens-Illinois Glass Co.

A voluntary collection to provide a \$25 War Bond for each of their 215 fellow workers now in the armed forces was recently taken up by employees of the Paraffine Companies, San Francisco.

Two reconditioned blast furnaces, one idle since 1930, the other since 1932, have been put into operation at Granite City, Ill., by Koppers United Co. Total capacity will be more than 1,000 tons a day. Company is also building a new coke plant on the site.

An electronic measuring device that will distinguish between 2,000,000 colors for use in camouflage standardization is

a new General Electric product. Another one is a jigger that will tell an aviator how much danger there is from lightning in a nearby thunder-cloud.

One thousand executives and workers of the Edgewater Aluminum plant are donating one pint of blood each to the Red Cross. By careful scheduling, the 150 workers in the first day's parade were away from their tasks only 45 minutes.

When flood waters threatened to inundate the Piper Aircraft Co.'s airport, men and women employees left their stations and flew 100 planes to higher ground. They had learned to fly on spare time.

An additional investment in \$50,000,000 worth of government bonds signalized savings, building and loan associations' celebration of Ben Franklin's birthday. They expect to buy \$300,000,000 worth before the year's end.

A new combatant plane for the Navy is being designed by the Ryan Aeronautical Co. Heretofore the company has been producing just as important, but less glamorous trainers and exhaust manifold systems.

Two months ahead of schedule is the record of the American Propeller Corp., largest manufacturer of hollow steel propeller blades. This type blade has great resistance to corrosion and abrasion and in larger sizes is lighter than aluminum.

A new type, six cylinder Diesel engine for replacement on a cargo ship was assembled and shipped in five days, beating by nine days the delivery promise, by Cooper-Bessemer Corp.

A far-sighted labor policy has minimized labor turnover for the Ilg Electric Ventilating Co., Chicago. Forty-four per cent of employees with company in 1917 are still drawing Ilg Co. paychecks.

A new kind of "E" award was won by Crane Co., Chicago. The plant never converted to guns or ammunition—simply kept on making valves, fitting and piping accessories, but did it so well that armed forces were helped over many a troublesome bottleneck.

"How to Think Up Ideas" a booklet prepared by Batten, Barton, Durstine and Osborn, is part of that advertising agency's contribution to the war effort. It needles average Americans into mak-

ing suggestions that will speed up production.

One 2,000 HP Pratt & Whitney engine manufactured by Nash-Kelvinator is reported to have as much power as about 30 Nash "600" automobile motors.

The old popularity contest was reestablished by Marmon-Herrington to sell \$14,-288 worth of war bonds in a week. Six candidates for "Queen" were selected and every 25-cent stamp entitled the purchaser to 25 votes for his or her favorite.

A new cotton yarn which does not require long staple (now a critical material) has been developed by U. S. Rubber Co. for parachute harness which formerly required linen. Company has also developed a new asbestos fabric fitting to take place of critical materials in aircraft production. It will withstand heat of 350° F or a temperature as low as minus 40° F.

Pullman-Standard manufactured 500 railroad cars for hauling iron ore in less than six weeks. Made it possible to haul 90,000,000 more tons of ore from Minnesota to steel centers before winter set in.

Crystal clear protective hats of Lumarith, designed by Lilly Dache and made by M. B. Price Associates have been developed to protect beautiful blondes, red heads or brunettes from getting their tresses caught in defense plant machinery. The publicity says they would flatter even a Veronica Lake.

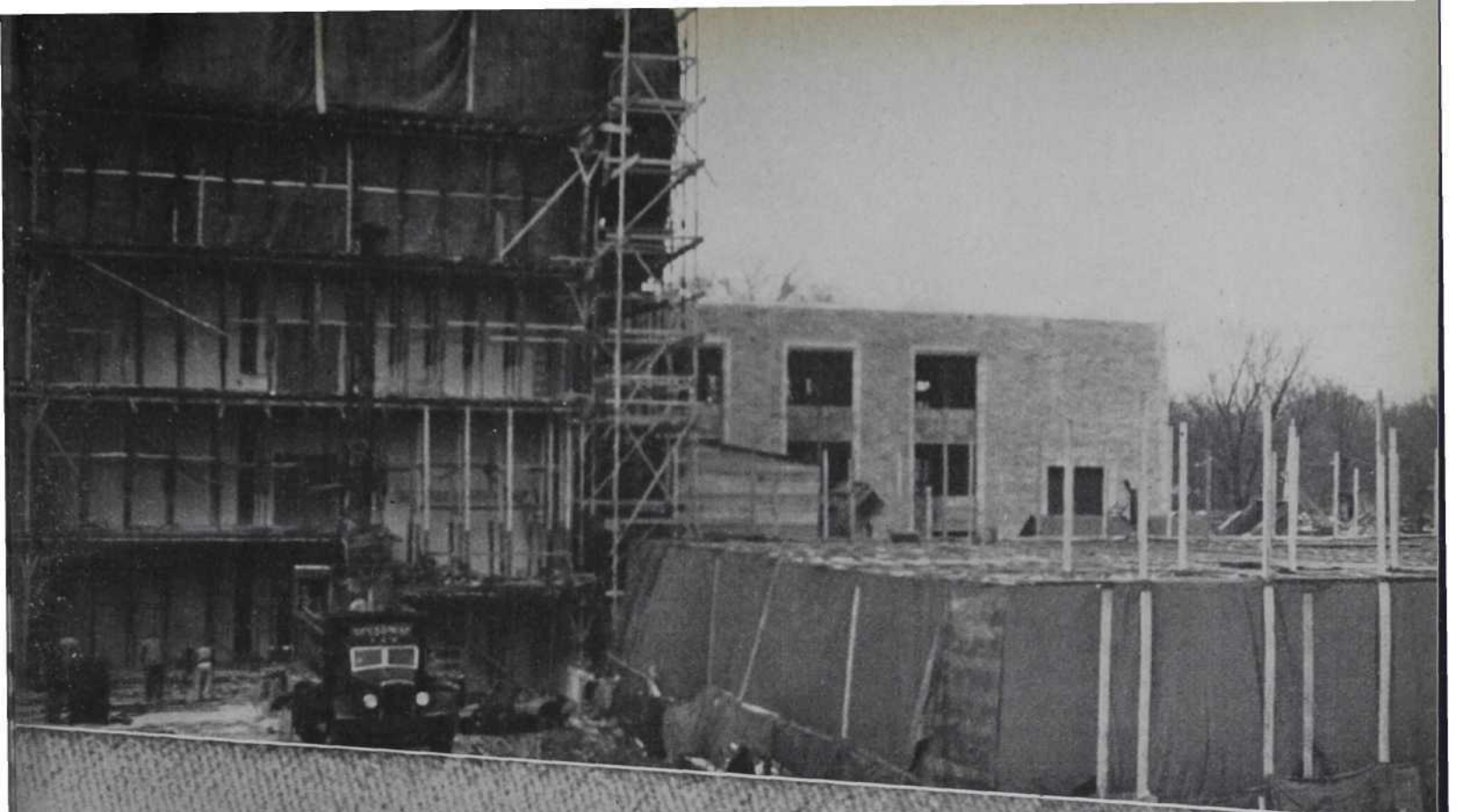
Research disclosed that fractures in the fuel line permitting gasoline to wash over hot engines caused airplane fires. Generally they started at the ends where they had been flared to hold on pipe connections. The Osborn Manufacturing Co., Cleveland, devised power brushes to smooth out these surfaces to an accuracy of four- to eight-millionths of an inch and 100 per cent faster than it can be done by hand—hundreds of fighters will thus be protected from an important source of fire.

Like the old jitney, the jeep continues to "wow 'em." Armed forces are using its motor for generating electrical power for searchlights, arc welding equipment, centrifugal water pumps for fire fighting, short-wave radio transmitters and receivers. The Marines use it to power life boats.

Six miles of wire of various sizes and types is used in the Boeing Flying Fortress.

A 14-room hospital, one of most modern in New Jersey, is newest addition to the Manhattan Rubber Division of Raybestos. It is completely staffed—has a modern operating room and a physiotherapy room where employees are given post-injury care.

A new, remote control, fire prevention device to protect pilots has been developed by Minneapolis-Honeywell. It eliminates need for piping gasoline and lubricating oil to indicating meters in the cockpit.



"Canvas Engineering" Protected this Million Dollar Construction Project

Fire — in flammable canvas windbreaks, tarpaulins and covers over building materials once caused \$500,000 Destruction on this Construction job.

But once was enough. It couldn't happen here, again. Every yard of replacement canvas on the rebuilding job was FIRE CHIEF-Finished Hooperwood Duck.

The application of correctly-engineered canvas to the specific requirements of the job is such a simple matter of plain, ordinary horse sense now that science has provided types of Cotton Duck resistant to almost every penetrating, dangerous or deteriorating influence with which they may come into contact — fire, water, weather, mildew, gasoline, oil, etc.

And after the war, when our entire production is no longer mobilized for Victory — HOOPERWOOD "Canvas Engineering" will have many more benefits in store for you. Awnings that won't ignite from carelessly-tossed cigarettes or rot from mildew — special canvas truck covers that will outlast their predecessors several times over — canvas marine supplies that will help strike out the fear of fire on shipboard — aircraft canvas fabrics that repel gasoline and oil.

These and many other applications of "HOOPERWOOD-engineered" fabrics for business and Industry will be waiting for you when business returns to normal.

WM. E. HOOPER & SONS CO.

New York PHILADELPHIA Chicago

Mills: WOODBERRY, BALTIMORE, MD.

Since 1800 (through six wars) the HOOPER name has symbolized highest quality in Cotton Duck and other Heavy Cotton Fabrics, Paper Mill Dryer Felts, Filter Cloth, Rope and Sash Cord.

HOOPERWOOD
REG. U.S. PAT. OFF.
DUCK
BALTIMORE

HOOPERWOOD COTTON DUCK

What is a MICRO-CHEK?

● The Trico Micro-Chek is a new type of comparator gage, used on inspection lines, or at machines, which speeds up the gaging of precision parts. It visually multiplies dimensions by 200. Its big, highly visible indicator greatly reduces eyestrain and fatigue. Its simplicity enables inexperienced workers quickly to become accurate inspectors. Our booklet tells more about its many applications.



Instrument
size
6" x 2 1/4"

MICRO-CHEK
with base plate
only . . . \$9.75
Adjustable Anvil . . . \$3.00
Other type
Anvils available.

WHO USES IT?

More than 1700 war plants and government arsenals . . . many of which time and again have re-ordered additional scores of Micro-Cheks.



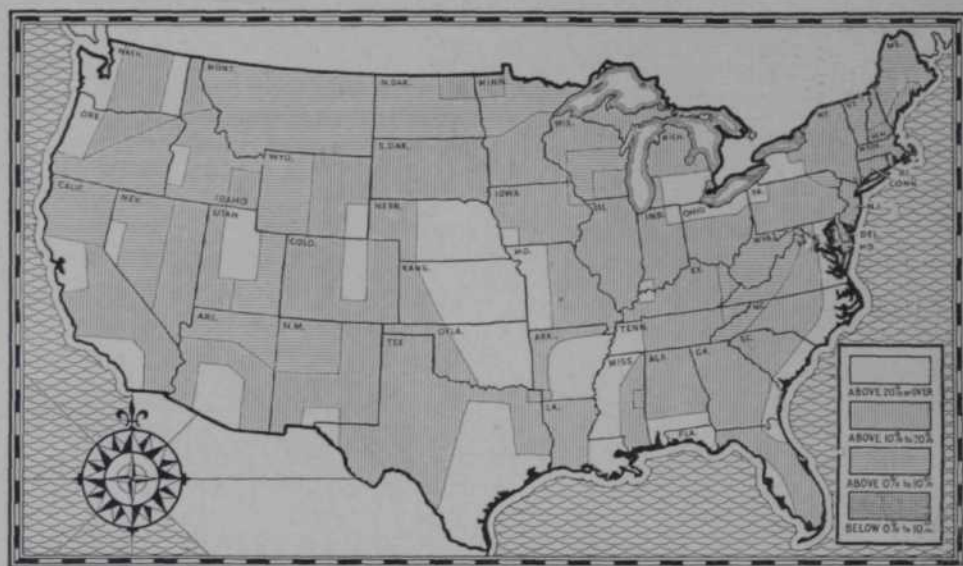
Send for **FREE** Micro-Chek booklet. Address:

TRICO

TRICO PRODUCTS CORP.
Dept. U, Buffalo, N. Y.

The Map of the Nation's Business

By FRANK GREENE

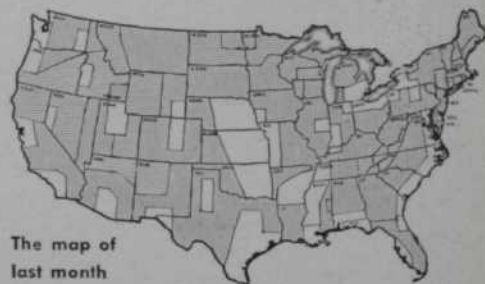


INDUSTRIAL activity held unchanged through January with munitions output 500 per cent above the pre-Pearl Harbor level. Steel production rose slightly from December with heavy demand for plate from shipbuilding and railroad equipment makers while net operating income of rails more than doubled that of last January. Electric output was up contraseasonally 15 per cent above a year ago.

Lumber again declined sharply due to labor shortage and engineering awards touched new lows with the curtailment of heavy ordnance plant construction.

Drastic driving restrictions caused serious losses to amusement and service agencies the country over. Stock markets improved for the ninth month in the sharpest rise and the largest volume for January since 1939. Farm product prices reached a 22-year peak, again lifting commodity averages to

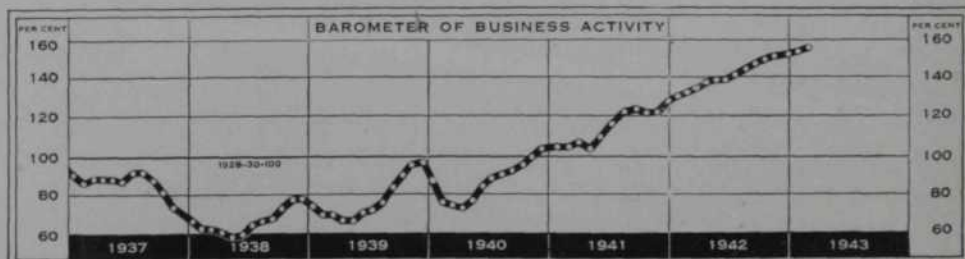
The Map reflects little change in previous condition of peak employment, income, war production, and agriculture.



The map of
last month

new highs.

Shortages alone curtailed activity in wholesale markets as retail sales equalled those of the January 1942 scare-buying period.



With more than half of the country's productive capacity devoted to the war effort, the Barometer for January rose to a further new high.



The Stuff Victory is Made of...

■ Greatest praise is due our fighting men for their valor so well proved in battle on land, sea and in the air. Their determination to win is echoed in the breast of every freedom-loving American.

No sacrifice by individuals or corporations or industries is too great a price to pay for the material support our armed forces must have to win this war. Hardly an industry in the land is not dedicating its all to this purpose. Included is the pulp and paper industry whose products now are being used enormously for vital military needs.

As a result of military necessity, the Government has issued a directive definitely curtailing paper production. This

creates a need for conservation of paper and paper products. Users of all grades of printing paper are cooperating in this emergency. Some publications are now issued in a restricted number of pages, others in a reduced page size. Advertisers are saving paper by producing printed pieces cut from standard size sheets. All along the production line in the printing trade, the need for conserving paper is recognized and practiced.

It is by concerted, wholehearted cooperation of every industry, every firm and every individual, that America demonstrates its will to win this war! This is the spirit that surely will speed our victory and a return to a better way of life.

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PRINTING PAPERS



Trufect[®]
For Highest-Quality Printing

Kimfect[®]
Companion to Trufect at
lower cost

Multifect[®]
For volume printing at
a price



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*"I'd walk many a mile
just to hand him
these Camels!"*



It's the most welcome gift you can
send him...a carton of Camels
—the soldiers' favorite

SURE, you'd rather *hand* them to him...but
you don't have to see him to know that he'll
appreciate a carton of Camels. For with men
in *all* the services, cigarettes are the gift they
want most from home.

And when you send him Camels—the *mild,
slow-burning* cigarette—you're sending the
brand men in the service prefer. Army, Navy,
Marines, Coast Guard—the favorite is Camel.*
Send *him* a carton today.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

Send him

Camels

*First in
the Service*

*The favorite cigarette with men in the
Army, Navy, Marines, and the Coast
Guard is Camel. (Based on actual sales
records in Post Exchanges, Sales
Commissaries, Ship's Service Stores,
Ship's Stores, and Canteens.)



MAYBE HE WEARS the O.D. of the Army—
maybe the blue of the Navy and Coast Guard—
or the forest green of the Marines—it's all the
same: Camels, with that "I'd walk a mile for—"
flavor, will be welcome as often as you send
them. So—send him a carton of Camels today.